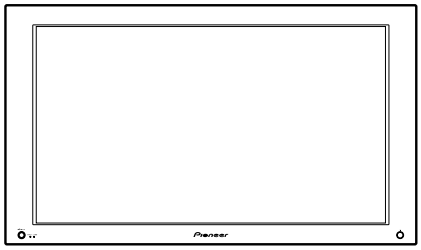
Pioneer sound.vision.soul

Service Manual



PDP-5050SX

ORDER NO.
ARP3261

PLASMA DISPLAY SYSTEM

PDP-5050SX
PDP-4350SX

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	Remarks
PDP-5050SX	KUC	AC120V	
PDP-4350SX	KUC	AC120V	

For details, refer to "Important Check Points for good servicing".

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ⓒ**PIONEER CORPORATION 2005**

T-ZZY MAY 2005 printed in Japan

SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 - Proposition 65

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

SAFETY PRECAUTIONS

NOTICE : Comply with all cautions and safety related notes located on or inside the cabinet and on the chassis.

The following precautions should be observed :

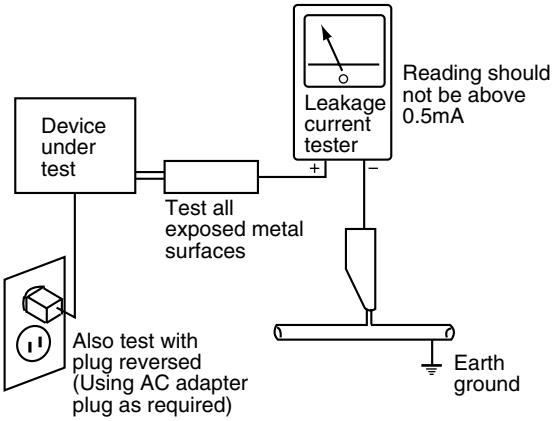
1. When service is required, even though the PDP UNIT an isolation transformer should be inserted between the power line and the set in safety before any service is performed.
2. When replacing a chassis in the set, all the protective devices must be put back in place, such as barriers, nonmetallic knobs, adjustment and compartment covershields, isolation resistor-capacitor, etc.
3. When service is required, observe the original lead dress. Extra precaution should be taken to assure correct lead dress in the high voltage circuitry area.
4. Always use the manufacture's replacement components. Especially critical components as indicated on the circuit diagram should not be replaced by other manufacture's. Furthermore where a short circuit has occurred, replace those components that indicate evidence of overheating.
5. Before returning a serviced set to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock, and be sure that no protective device built into the set by the manufacture has become defective, or inadvertently defeated during servicing. Therefore, the following checks should be performed for the continued protection of the customer and servicetechnician.
6. Perform the following precautions against unwanted radiation and rise in internal temperature.
   - Always return the internal wiring to the original styling.
   - Attach parts (Gascket, Ferrite Core, Ground, Rear Cover, Shield Case etc.) surely after disassembly.
7. Perform the following precautions for the PDP panel.
   - When the front case is removed, make sure nothing hits the panel face, panel corner, and panel edge (so that the glass does not break).
   - Make sure that the panel vent does not break. (Check that the cover is attached.)
   - Handle the FPC connected to the panel carefully. Twisting or pulling the FPC when connecting it to the connector will cause it to peel off from the panel.
8. Pay attention to the following.
   - When the front case is removed, infrared ray is radiated and may disturb reception of the remote control unit.
   - Pay extreme caution when the front case and rear panel are removed because this may cause a high risk of disturbance to TVs and radios in the surrounding.

Leakage Current Cold Check

With the AC plug removed from an AC power source, place a jumper across the two plug prongs. Turn the AC power switch on. Using an insulation tester (DC 500V), connect one lead to the jumpered AC plug and touch the other lead to each exposed metal part (input/output terminals, screwheads, metal overlays, control shafts, etc.), particularly any exposed metal part having a return path to the chassis. Exposed metal parts having a return path to the chassis should have a minimum resistor reading of 0.3MΩ and a maximum resistor reading of 5MΩ. Any resistor value below or above this range indicates an abnormality which requires corrective action. Exposed metal parts not having a return path to the chassis will indicate an open circuit.

Leakage Current Hot Check

Plug the AC line cord directly into an AC power source (do not use an isolation transformer for this check).
Turn the AC power switch on.
Using a "Leakage Current Tester (Simpson Model 229 equivalent)", measure for current from all exposed metal parts of the cabinet (input/output terminals, screwheads, metal overlays, control shaft, etc.), particularly any exposed metal part having a return path to the chassis, to a known earth ground (water pipe, conduit, etc.). Any current measured must not exceed 0.5mA.


Reading should not be above 0.5mA
Leakage current tester
+
–
Device under test
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE SET TO THE CUSTOMER.

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in PIONEER set have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.
Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire or other hazards.
Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

■Charged Section

The places where the commercial AC power is used without passing through the power supply transformer.
If the places are touched, there is a risk of electric shock. In addition, the measuring equipment can be damaged if it is connected to the GND of the charged section and the GND of the non-charged section while connecting the set directly to the commercial AC power supply. Therefore, be sure to connect the set via an insulated transformer and supply the current.

1. AC Power Cord
2. AC Inlet with Filter
3. Power Switch (S1)
4. Fuse (In the PANEL POWER SUPPLY Unit and MR POWER SUPPLY Unit)
5. STB Transformer and Converter Transformer (In the PANEL POWER SUPPLY Unit and MR POWER SUPPLY Unit)
6. Other primary side of the PANEL POWER SUPPLY Unit and MR POWER SUPPLY Unit
7. AC SEPA Assy

: Part is Charged Section.

: Part is the High Voltage Generating Points other than the Charged Section.

■High Voltage Generating Point

The places where voltage is 100V or more except for the charged places described above. If the places are touched, there is a risk of electric shock.

1. PANEL POWER SUPPLY Unit.....(223V)
2. 50 X DRIVE Assy ..... (–230V to 223V)
3. 50 Y DRIVE Assy ..... (353V)
4. 50 SCAN A Assy ..... (353V)
5. 50 SCAN B Assy ..... (353V)
6. X CONNECTOR A Assy .....(–230V to 223V)
7. X CONNECTOR B Assy ..... (–230V to 223V)

Discharge the VSUS voltage, as shown below:

[Method for discharging the VSUS voltage]

1. Set DRF_SW on the DIGITAL VIDEO Assy to ON (Drive OFF status). *1, 2
2. Leave the switch at that position for about 20-30 seconds.
3. If the power is on, turn it off. Then return DRF_SW to the OFF position. *3

Notes

*1: You can also set the unit to "Drive OFF status" by sending the "DRF" RS-232C command from the PC.
*2: DRF_SW can be switched whether the power is on or off.
*3: Power-down will occur if DRF_SW is set to OFF while the power is on. (See "7.1.5 Power on/off function for the large-signal system".)

• For PDP-5050SX

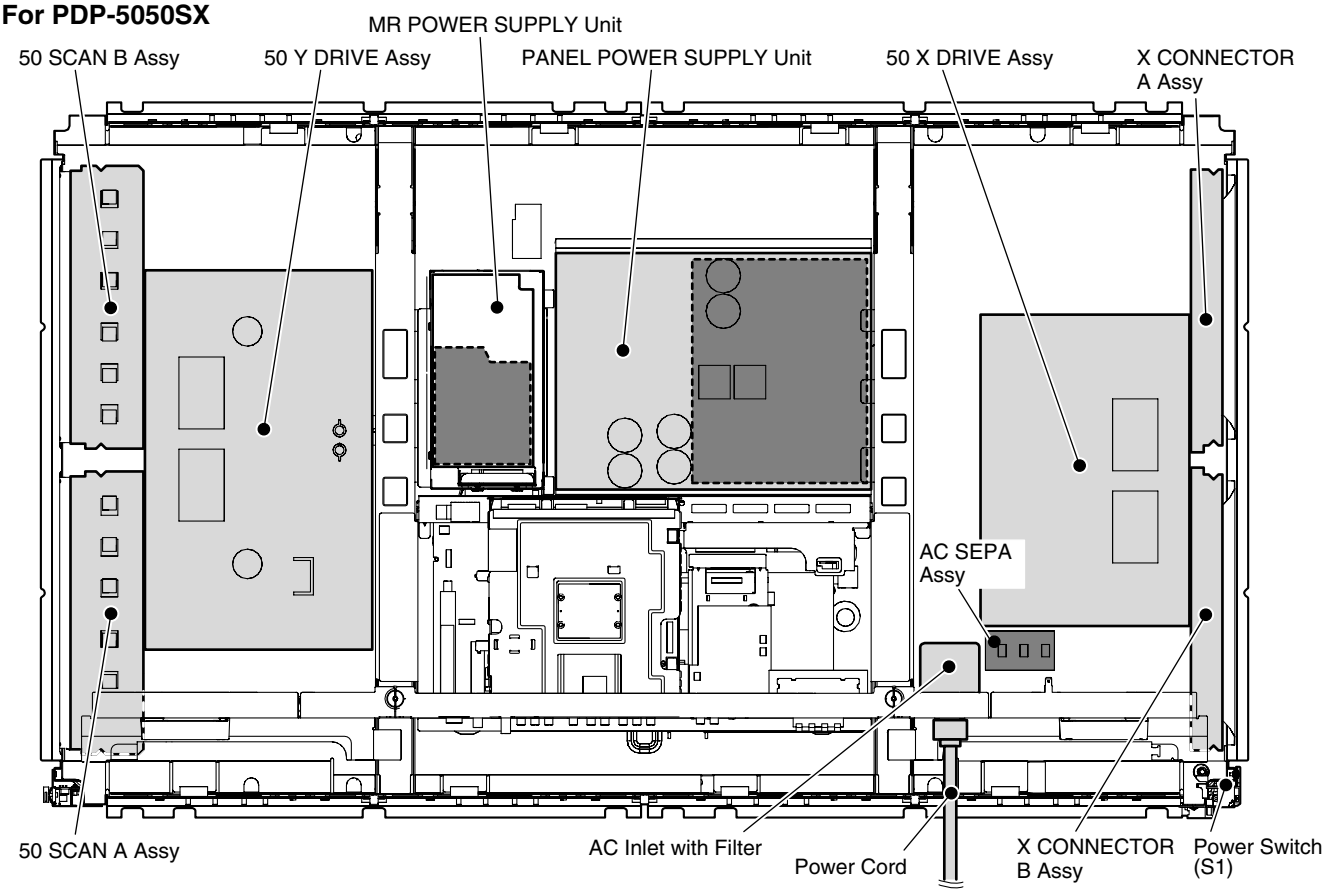


Fig.2 Charged Section and High Voltage Generating Point (Rear View)

■Charged Section

The places where the commercial AC power is used without passing through the power supply transformer.
If the places are touched, there is a risk of electric shock. In addition, the measuring equipment can be damaged if it is connected to the GND of the charged section and the GND of the non-charged section while connecting the set directly to the commercial AC power supply. Therefore, be sure to connect the set via an insulated transformer and supply the current.

1. AC Power Cord
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4. Fuse (In the PANEL POWER SUPPLY Unit and MR POWER SUPPLY Unit)
5. STB Transformer and Converter Transformer (In the PANEL POWER SUPPLY Unit and MR POWER SUPPLY Unit)
6. Other primary side of the PANEL POWER SUPPLY Unit and MR POWER SUPPLY Unit
7. AC SEPA Assy

: Part is Charged Section.

: Part is the High Voltage Generating Points other than the Charged Section.

■High Voltage Generating Point

The places where voltage is 100V or more except for the charged places described above. If the places are touched, there is a risk of electric shock.

1. PANEL POWER SUPPLY Unit.....(215V)
2. 43 X DRIVE Assy ..... (–235V to 215V)
3. 43 Y DRIVE Assy ..... (345V)
4. 43 SCAN A Assy ..... (345V)
5. 43 SCAN B Assy ..... (345V)
6. X CONNECTOR A Assy ..... (–235V to 215V)
7. X CONNECTOR B Assy ..... (–235V to 215V)

Discharge the VSUS voltage, as shown below:

[Method for discharging the VSUS voltage]

1. Set DRF_SW on the DIGITAL VIDEO Assy to ON (Drive OFF status). *1, 2
2. Leave the switch at that position for about 20-30 seconds.
3. If the power is on, turn it off. Then return DRF_SW to the OFF position. *3

Notes

*1: You can also set the unit to "Drive OFF status" by sending the "DRF" RS-232C command from the PC.
*2: DRF_SW can be switched whether the power is on or off.
*3: Power-down will occur if DRF_SW is set to OFF while the power is on. (See "7.1.5 Power on/off function for the large-signal system".)

• For PDP-4350SX

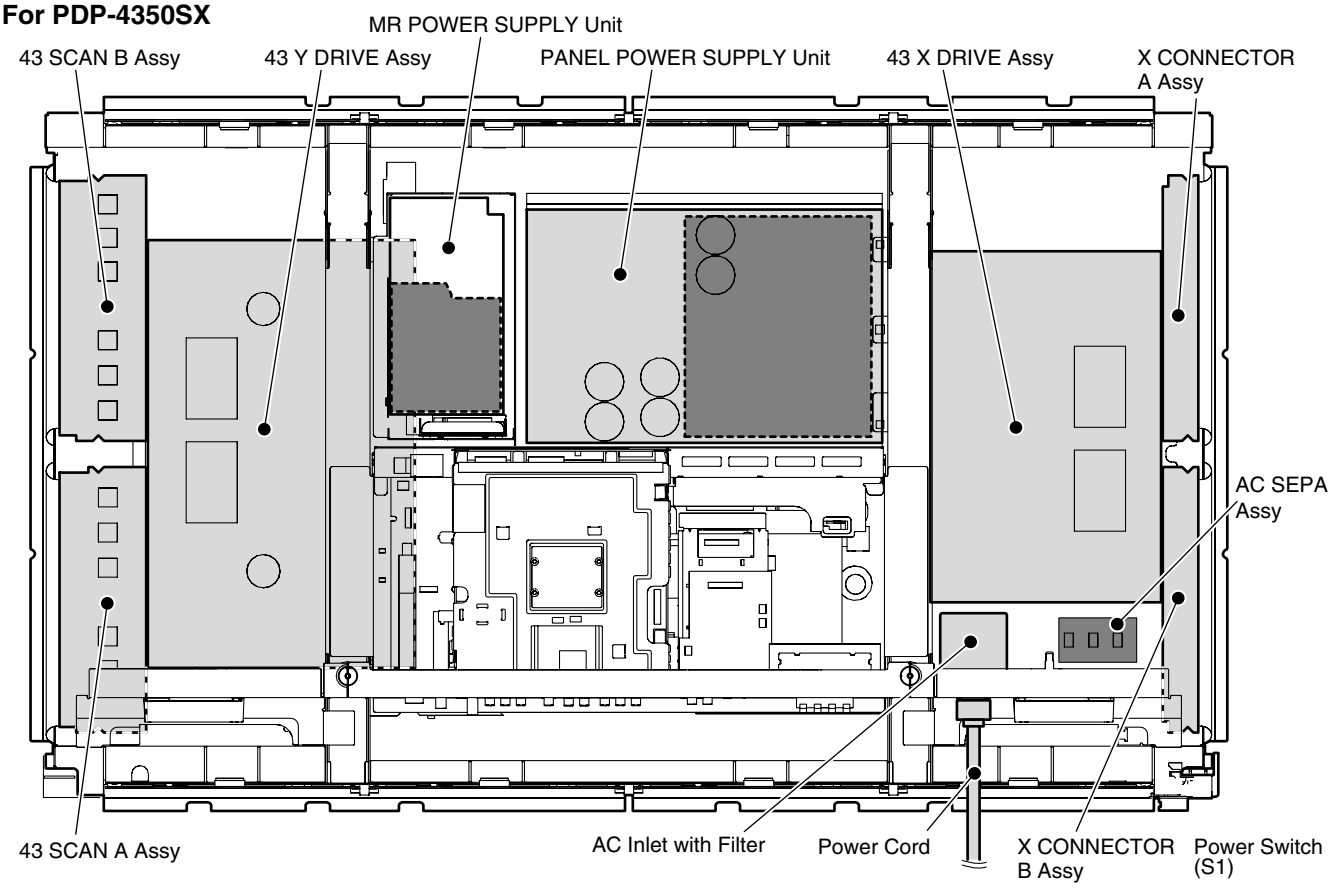

Fig.1 Charged Section and High Voltage Generating Point (Rear View)

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol.
Please be sure to confirm and follow these procedures.

1. Product safety

Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification(addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.
Soldering should be finished with the proper quantity. (Refer to the example)

④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.
In addition, be sure that there are no pinched wires, etc.

⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.
If you find a damaged power cord, please exchange it with a suitable one.

⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.
Please pay attention to your surroundings and repair safely.

2. Adjustments

To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts

Use grease and adhesives that are equal to the specified substance.
Make sure the proper amount is applied.

4. Cleaning

For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws

To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

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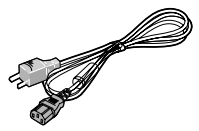
1. SPECIFICATIONS

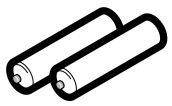
Item			50"Plasma Display, Model: PDP-5050SX	43"Plasma Display, Model: PDP-4350SX
Number of Pixels			1280 × 768 pixels	1024 × 768 pixels
Audio Amplifier			13 W + 13 W (1 kHz, 10 %, 8 Ω)	13 W + 13 W (1 kHz, 10 %, 8 Ω)
Surround System			SRS/FOCUS/TruBass	SRS/FOCUS/TruBass
Power Requirement			120 V AC, 60 Hz, 406 W (31 W Standby, 120 V)	120 V AC, 60 Hz, 341 W (31 W Standby, 120 V)
Dimensions			1270 (W) × 737 (H) × 119 (D) mm (50 (W) × 29 (H) × 4 11/16 (D) inches)	1120 (W) × 652 (H) × 119 (D) mm (44 1/8 (W) × 25 11/16 (H) × 4 11/16 (D) inches)
Weight			36.0 kg (79.4 lbs.)	29.8 kg (65.7 lbs.)
Reception System	(Digital)		ATSC Digital TV system	
	Circuit type		8VSB/64QAM/256QAM/QPSK demodulation	
	Tuner	VHF/UHF	VHF 2-13ch, UHF 14-69ch	
		CATV	2-135ch	
	Audio format		Dolby Digital	
Reception System	(Analog)		American TV standard NTSC system	
	Circuit type		Video signal detection PLL full synchronous detection, PLL digital synthesizer system	
	Tuner	VHF/UHF	VHF 2-13ch, UHF 14-69ch	
		CATV	ANTENNA/CABLE A IN: 1-135ch Cable: 1-125ch	
	Audio multiplex		BTSC system	
Terminals Rear	ANTENNA/CABLE A IN		75 Ω UNBAL, F Type for DTV/VHF/UHF/CATV in	
	ANTENNA B		75 Ω UNBAL, F Type for VHF/UHF/CATV in (Loop out)	
	INPUT 1		COMPONENT VIDEO in, S-VIDEO in, VIDEO in, AUDIO in	
	INPUT 2		S-VIDEO in, VIDEO in, AUDIO in	
	INPUT 3		AUDIO in, HDMI in	
	INPUT 4		COMPONENT VIDEO in, AUDIO in	
	Monitor Out		VIDEO out, AUDIO out	
	Digital Audio Output		Optical (1)	
	CONTROL OUT		1	
	Cable CARD		Point of Deployment	
OSD			English/French/Spanish	

• Design and specifications are subject to change without notice.

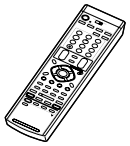
● Accessories



Power cord
(2 m/6.6 feet)
(ADG1215)

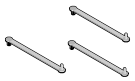


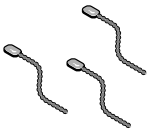
AA size battery × 2
(Alkaline battery)
(VEM1021)



Remote control unit
(AXD1502)

Cleaning cloth
(AED1208)

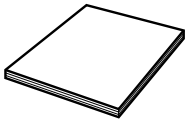




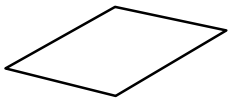
Speed clamp × 3

Bead band × 3

Binder Assy (AEC1908)



Operating Instructions
(ARE1394)



Warranty card
(ARY1138)

A

B

C

D

E

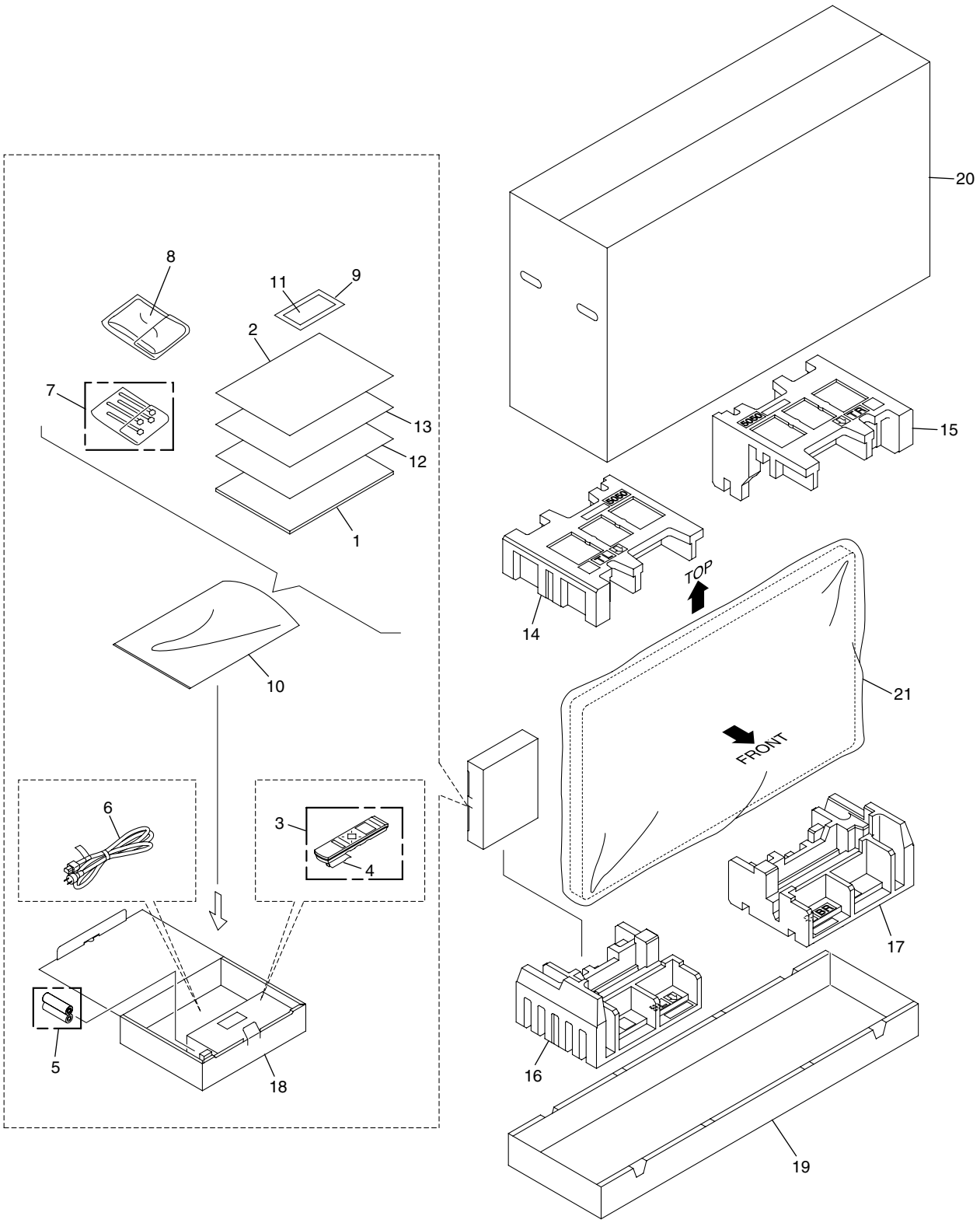
F

2. EXPLODED VIEWS AND PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on product are used for disassembly.*
- *For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions, apply as you think it appropriate.)*

2.1 PDP-5050SX

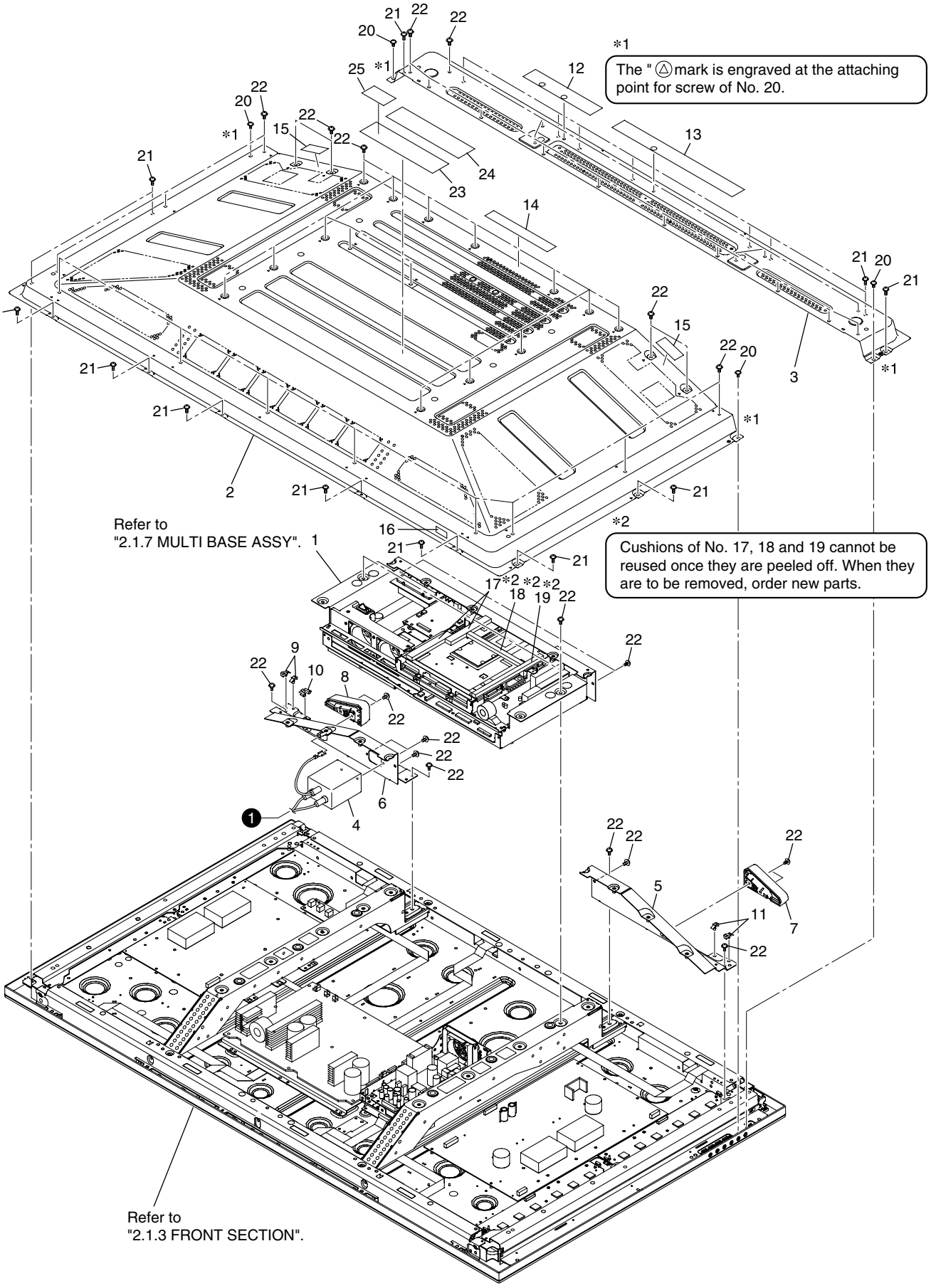
2.1.1 PACKING SECTION



PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Operating Instructions (English / French / Spanish)	ARE1394
	2	Caution	ARM1232
	3	Remote Control Unit	AXD1502
	4	Battery Cover	AZA7424
NSP	5	Dry Cell Battery	VEM1021
⚠	6	Power Cord	ADG1215
	7	Binder Assy	AEC1908
	8	Cleanning Cloth	AED1208
	9	Polyethylene Bag S	AHG1338
NSP	10	Catalogue Bag	AHG1340
NSP	11	Warranty Card	ARY1138
	12	DCR User Card	ARY1162
NSP	13	User Card	VRY1132
	14	Pad (50T-L)	AHA2439
	15	Pad (50T-R)	AHA2440
	16	Pad (50B-L)	AHA2441
	17	Pad (50B-R)	AHA2442
	18	Accessory Case (SX)	AHC1066
	19	Under Carton (5050)	AHD3358
	20	Upper Carton (5050)	AHD3352
	21	Mirror Mat	AHG1284

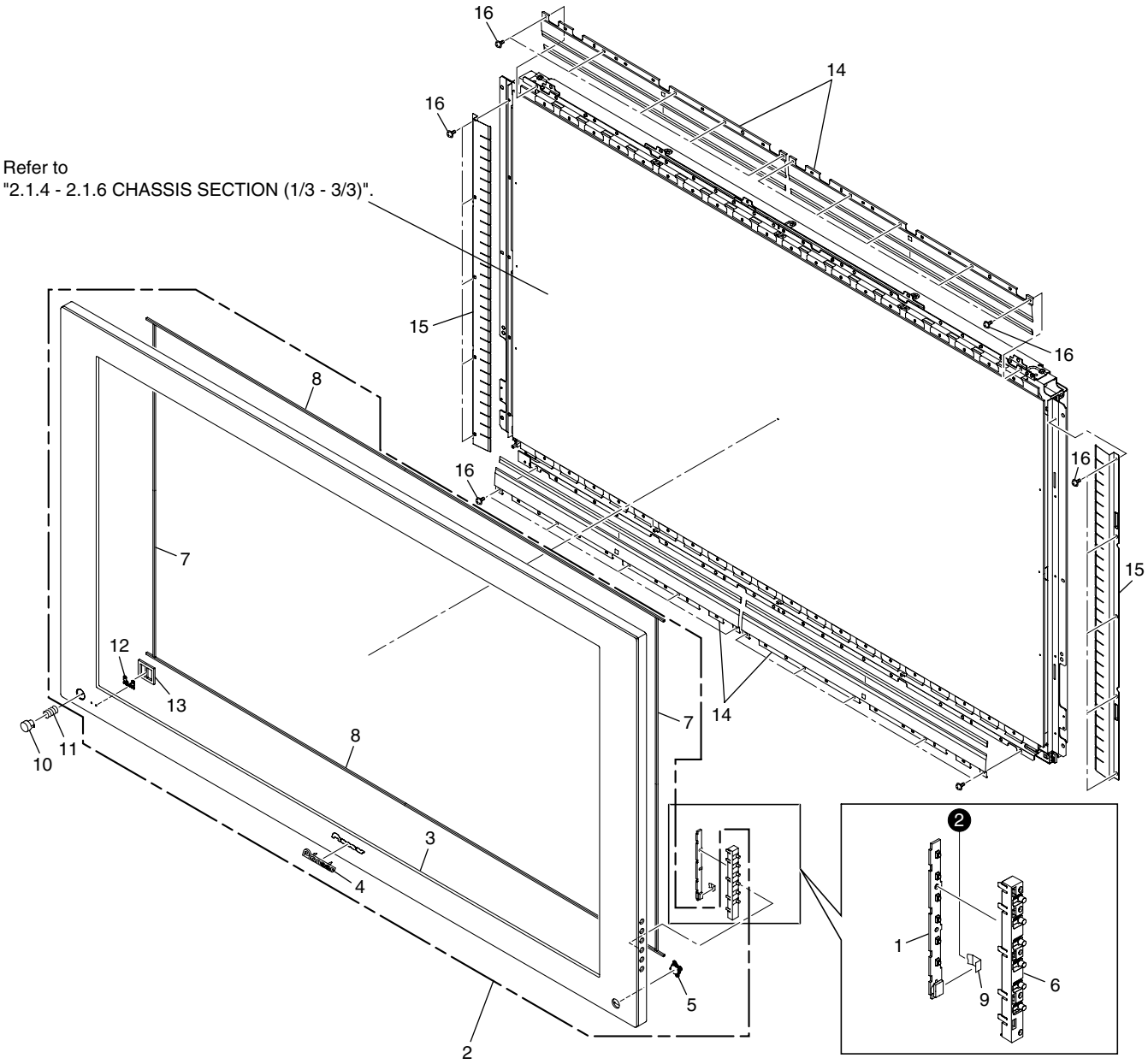
2.1.2 EXTERIOR SECTION


The " △ mark is engraved at the attaching point for screw of No. 20.
Cushions of No. 17, 18 and 19 cannot be reused once they are peeled off. When they are to be removed, order new parts.
Refer to "2.1.7 MULTI BASE ASSY".
Refer to "2.1.3 FRONT SECTION".

EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.
NSP	1	Multi Base Assy	AWU1122
	2	Rear Case (5050)	ANE1642
	3	Under Cover (5050)	ANG2744
⚠	4	AC Inlet	AKP1263
	5	Terminal Panel R	ANG2755
	6	Terminal Panel L	ANG2754
	7	Grip R	AMR3441
	8	Grip L	AMR3440
	9	Mini Clamp	AEC1805
	10	Edge Saddle	AEC2030
	11	Locking Wire Saddle	AEC1948
	12	Terminal Label (POW)	AAX3186
	13	Terminal Label (SX)	AAX3185
	14	Terminal Label (POD)	AAX3184
	15	Grip Label	AAX3188
	16	Serial Seal	AAX3143
	17	Cushion	AED1274
	18	Cushion	AED1273
	19	Cushion	AED1271
	20	Screw	ABA1333
	21	Screw	ABZ30P100FTB
	22	Screw	AMZ30P060FTB
NSP	23	Name Label (5050)	AAL2672
	24	Caution Label	AAX3195
NSP	25	Label	VRW1629

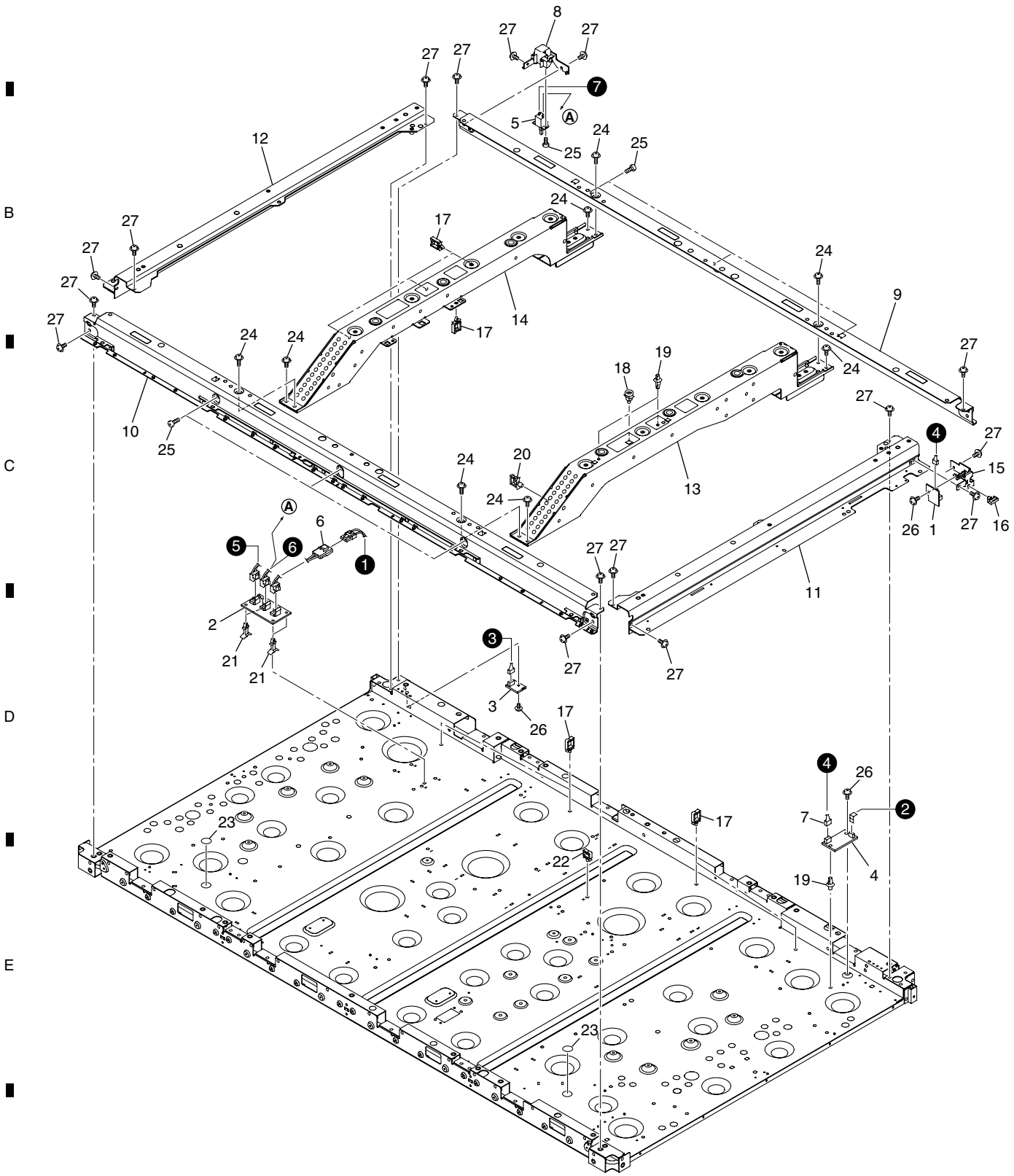
2.1.3 FRONT SECTION



FRONT SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	KEY Assy	AWW1011
	2	Front Case Assy (5050)	AMB2860
NSP	3	Front Case (50P)	AMB2823
	4	Pioneer Badge	AAM1098
NSP	5	SR Lens (P)	AAK2798
NSP	6	Function Button	AAC1555
	7	Panel Cushion V (50)	AED1258
	8	Panel Cushion H (50)	AED1257
	9	Flexible Flat Cable (J211)	ADD1225
	10	Power Button	AAD4127
	11	Coil Spring	ABH1114
NSP	12	LED Lens (P)	AAK2799
	13	Blind Cushion	AEB1383
	14	Panel Holder H Assy (50)	ANG2678
	15	Panel Holder V (50)	ANG2663
	16	Screw	ABZ30P060FTC

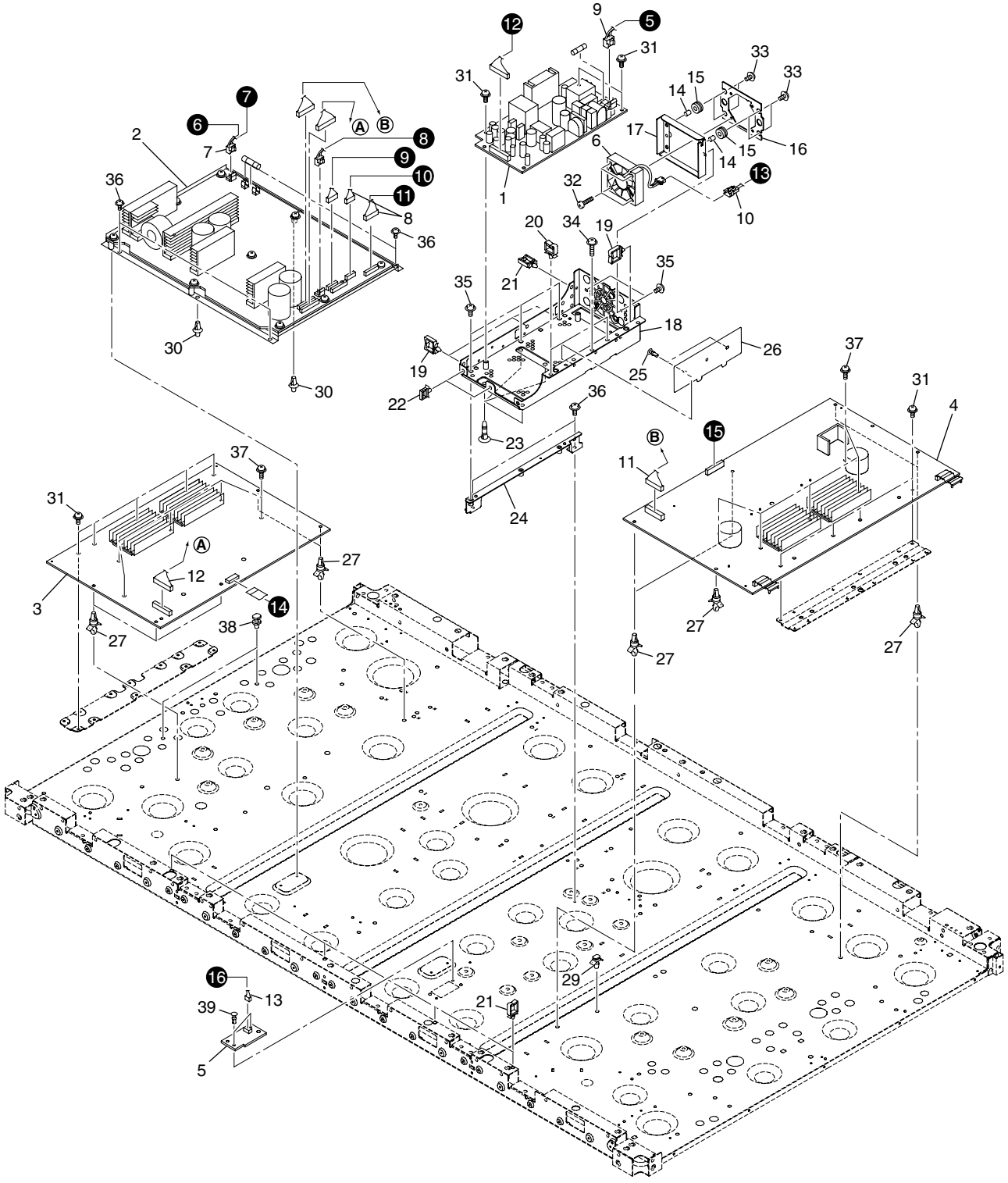
2.1.4 CHASSIS SECTION (1/3)



CHASSIS SECTION (1/3) PARTS LIST

Mark	No.	Description	Part No.
	1	PANEL IR Assy	AWZ6845
	2	AC SEPA Assy	AWV1010
	3	LED Assy	AWW1009
	4	KEY CONTROL Assy	AWZ6844
⚠	5	Power Switch (S1)(POWER)	ASG1092
	6	Housing Wire A (J226)	ADX3106
	7	11P Housing Wire (J225)	ADX3105
	8	Switch Holder	AMR3402
	9	Front Chassis HD Assy (50)	ANA1793
	10	Front Chassis HU Assy (50)	ANA1792
	11	Front Chassis VL (5050)	ANA1847
	12	Front Chassis VR (5050)	ANA1848
	13	Sub Frame L Assy (5050)	ANG2758
	14	Sub Frame R Assy (5050)	ANG2759
	15	IR Holder	ANG2665
	16	Locking Wire Saddle	AEC1948
	17	Wire Saddle	AEC1745
	18	Toggle Fixer	AEC2021
	19	PCB Spacer	AEC1947
	20	Wire Saddle	AEC2031
	21	Circuit Board Spacer	AEC1872
	22	Wire Saddle	AEC1751
	23	Rear Corner Label (15)	AAX3081
	24	Screw	AMZ30P080FTC
	25	Screw	BPZ30P080FTB
	26	Screw	ABZ30P060FTC
	27	Screw	AMZ30P060FTB

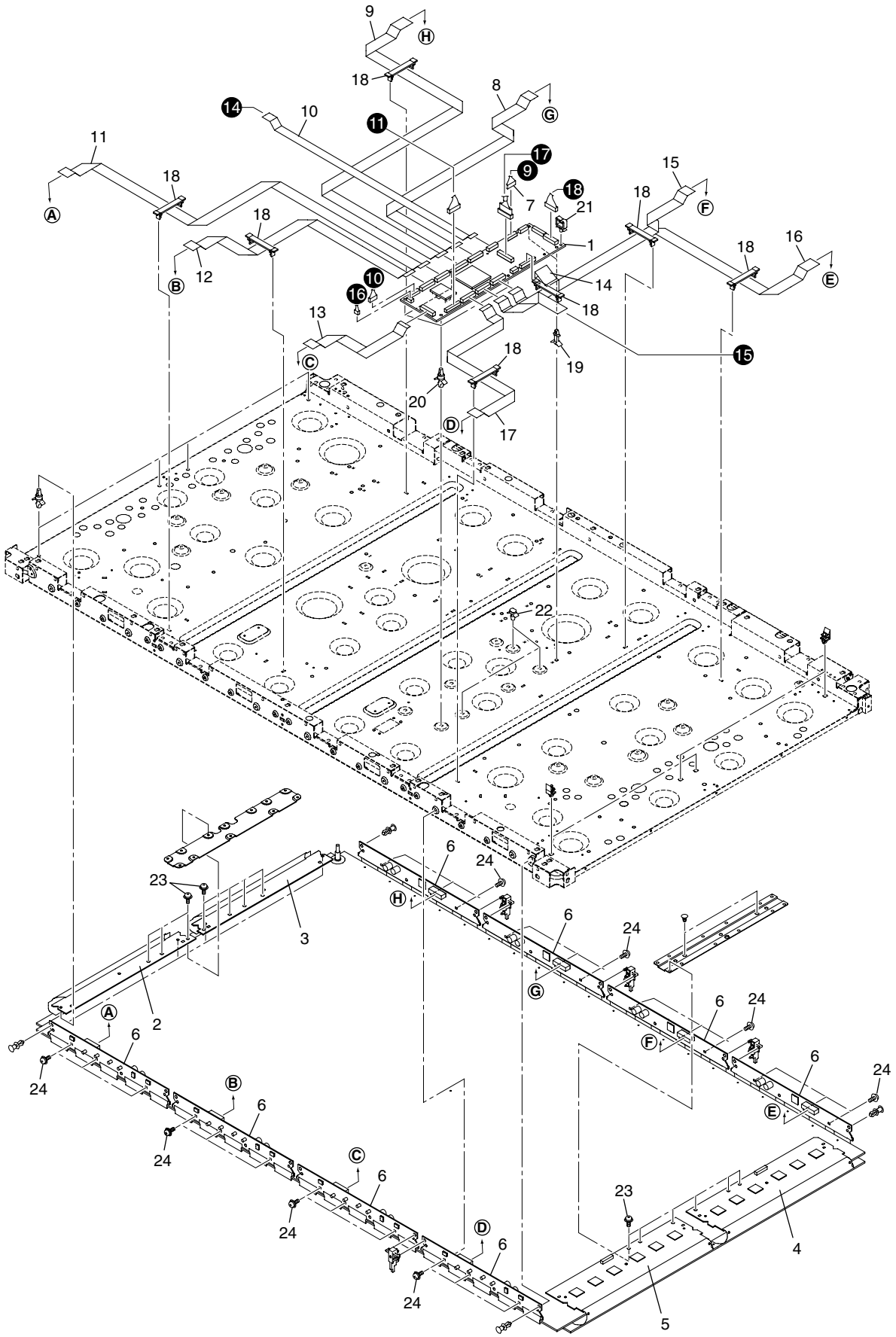
2.1.5 CHASSIS SECTION (2/3)



CHASSIS SECTION (2/3) PARTS LIST

Mark	No.	Description	Part No.
⚠	1	MR POWER SUPPLY Unit	AXY1091
⚠	2	PANEL POWER SUPPLY Unit	AXY1107
	3	50 X DRIVE Assy	AWZ6877
	4	50 Y DRIVE Assy	AWV2082
	5	PANEL SENSOR Assy	AWZ6872
	6	Fan Motor	AXM1043
	7	Housing Wire (J230)	ADX3108
	8	8P, 9P Housing Wire (J101)	ADX3098
	9	Housing Wire B (J229)	ADX3107
	10	3P Housing Wire (J231)	ADX3104
	11	11P Housing Wire (J102)	ADX2950
	12	12P Housing Wire (J103)	ADX2951
	13	3P Housing Wire (J109)	ADX2948
	14	Bush Holder	ABA1326
	15	Insulation Bush	AEB1408
	16	MR Fan Plate	ANG2750
	17	MR Fan Holder	ANG2751
	18	MR Power Supply Chassis	ANA1849
	19	Wire Saddle	AEC1797
	20	Wire Saddle	AEC1751
	21	Wire Saddle	AEC1745
	22	Wire Saddle	AEC2031
	23	PCB Holder	AEC1097
	24	MR Power Supply Stay	ANG2779
	25	Nylon Rivet	AEC2020
	26	MR Power Supply Insulation Sheet	AMR3467
	27	PCB Spacer	AEC1941
	28	•••••	
	29	PCB Support	AEC1938
	30	PCB Spacer	AEC1947
	31	Screw	PMB30P060FNI
	32	Screw	BBZ35P200FTC
	33	Screw	ABZ30P100FTB
	34	Screw	APZ40P160FTB
	35	Screw	AMZ30P060FTB
	36	Screw	ABZ30P060FTC
	37	Screw	VBB30P080FNI
	38	Card Spacer	AEC2013
	39	Nylon Rivet	AEC1671

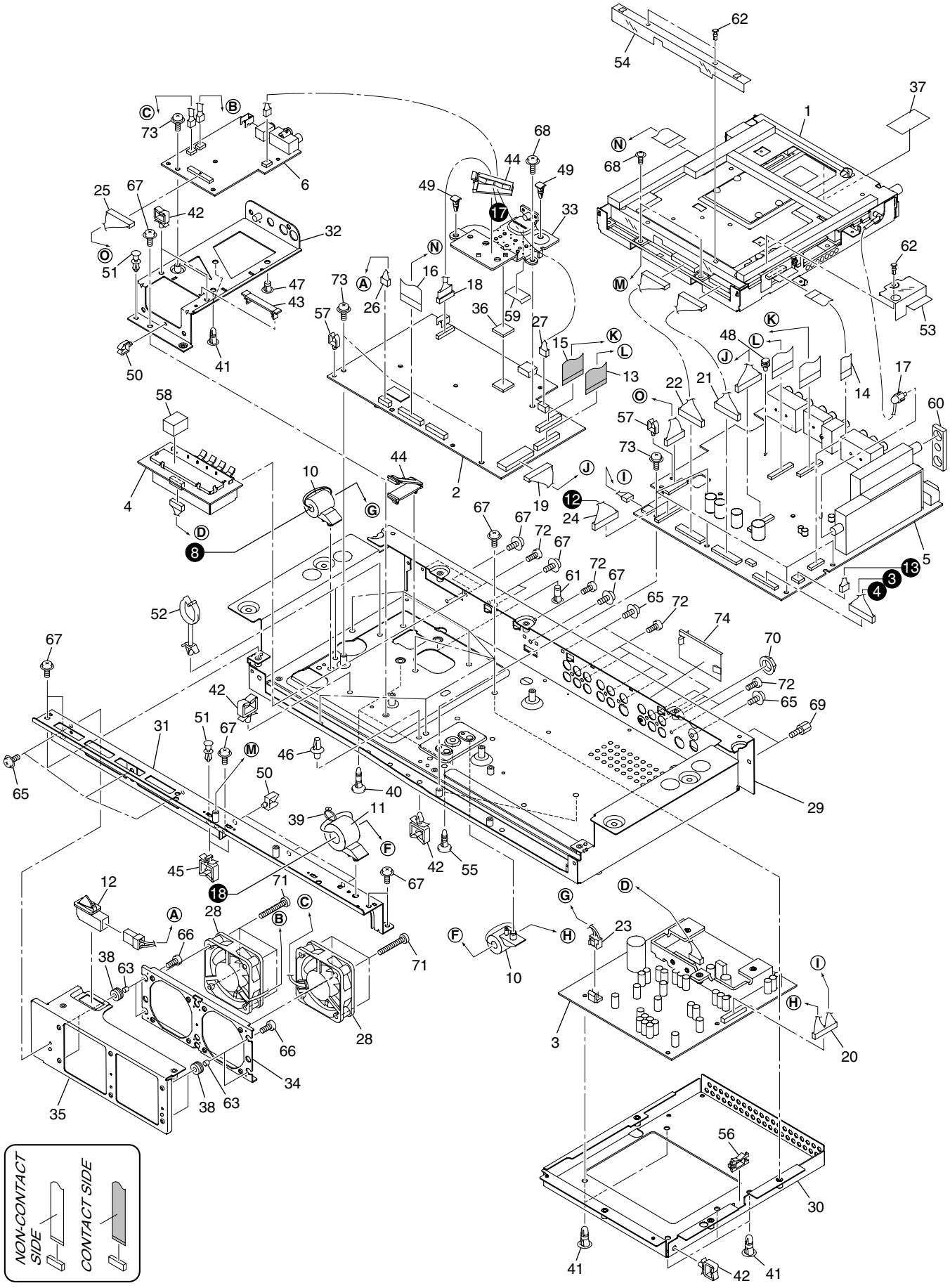
2.1.6 CHASSIS SECTION (3/3)



CHASSIS SECTION (3/3) PARTS LIST

Mark	No.	Description	Part No.
	1	DIGITAL VIDEO Assy	AWV2181
NSP	2	X CONNECTOR A Assy	AWZ6880
NSP	3	X CONNECTOR B Assy	AWZ6881
NSP	4	50 SCAN A Assy	AWZ6878
NSP	5	50 SCAN B Assy	AWZ6879
NSP	6	50 ADDRESS assy	AWZ6870
	7	8P, 9P Housing Wire (J218)	ADX3099
	8	Flexible Flat Cable (J207)	ADD1254
	9	Flexible Flat Cable (J208)	ADD1255
	10	Flexible Flat Cable (J210)	ADD1271
	11	Flexible Flat Cable (J204)	ADD1283
	12	Flexible Flat Cable (J203)	ADD1250
	13	Flexible Flat Cable (J202)	ADD1249
	14	Flexible Flat Cable (J209)	ADD1270
	15	Flexible Flat Cable (J206)	ADD1292
	16	Flexible Flat Cable (J205)	ADD1252
	17	Flexible Flat Cable (J201)	ADD1248
	18	Flat Clamp	AEC1879
	19	Circuit Board Spacer	AEC1872
	20	PCB Spacer	AEC1941
	21	Mini Clamp	AEC2024
	22	PCB Support	AEC1938
	23	Screw	PMB30P060FNI
	24	Screw	VBB30P080FNI

2.1.7 MULTI BASE ASSY (PDP-5050SX and PDP-4350SX)

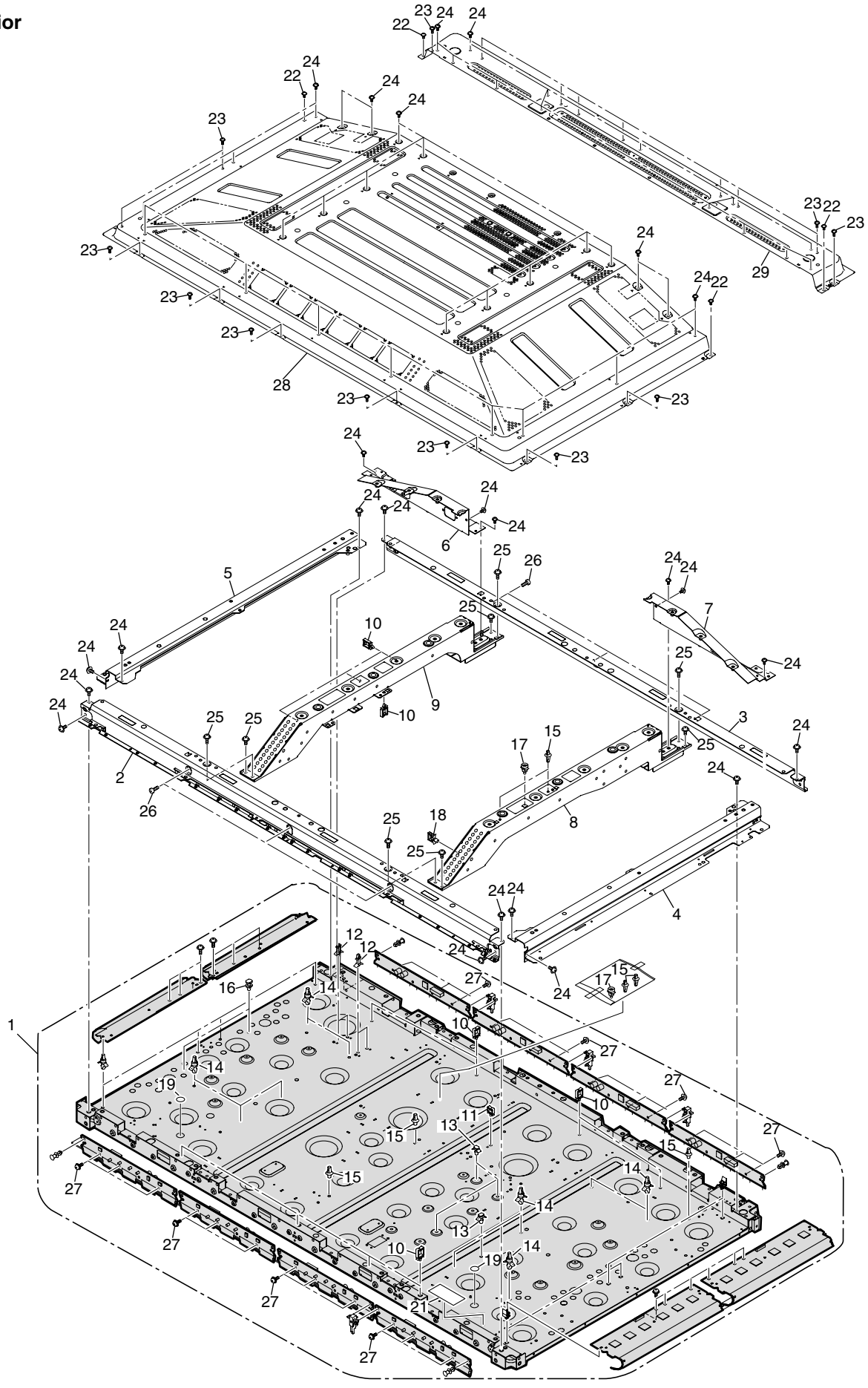


MULTI BASE ASSY PARTS LIST

Mark	No.	Description	Part No.
	1	TUNER BOARD Assy	AWE1303
	2	MAIN BOARD Assy	AWV2183
	3	AUDIO AMP Assy	AWW1005
	4	SP TERMINAL Assy	AWW1006
	5	AV BOARD Assy	AWW1007
	6	SR Assy	AWW1008
	7	•••••	
	8	•••••	
	9	•••••	
	10	Ferrite Core (F101, F102)	ATX1053
	11	Ferrite Core (F103)	ATX1054
	12	Power Switch (S2)(TRAP)	ASG1089
	13	Flexible Cable (J212)	ADD1209
	14	Flexible Cable (J215)	ADD1267
	15	Flexible Cable (J213)	ADD1288
	16	Flexible Cable (J214)	ADD1289
	17	Plug Cord	ADE1191
	18	31P Shield Cable	ADE1192
	19	15P Housing Wire (J111)	ADX2968
	20	13P Housing Wire (J105)	ADX3089
	21	12P Housing Wire (J112)	ADX3090
	22	14P Housing Wire (J113)	ADX3091
	23	3P Housing Wire (J219)	ADX3092
	24	16P Housing Wire (J221)	ADX3093
	25	10P Housing Wire (J222)	ADX3094
	26	3P Housing Wire (J227)	ADX3095
	27	4P Housing Wire (J231)	ADX3097
⚠	28	Fan Motor 60 x 25L	AXM1047
	29	Multi Base Assy	ANA1850
	30	Audio Base	ANG2746
	31	Tuner Stay	ANG2747
	32	Front PCB Stay	ANG2749
	33	HDMI Heatsink	ANH1634
	34	Twin Fan Stay	ANG2748
	35	Twin Fan Holder	ANG2780
	36	Silicone Sheet HDMI	AEB1379
	37	DVI Cushion	AEB1396
	38	Prevent Insulation Bush	AEB1408
	39	Binder	AEC-093
	40	PCB Holder	AEC1097
	41	Spacer	AEC1256
	42	Wire Saddle	AEC1751
	43	Flat Clamp	AEC1879
	44	Clamp	AEC1884
	45	Reuse Wire Saddle	AEC1945
	46	PCB Spacer	AEC1947
	47	Card Spacer	AEC1957
	48	Mini Card Spacer	AEC1959
	49	Circuit Board Spaser	AEC1964
	50	Mini Clamp	AEC1967
	51	Nylon Rivet	AEC1968
	52	Harness Lifter 28	AEC1982
	53	Wind Stopper B	AEC2007
	54	Wind Stopper C	AEC2008
	55	Locking Card Spacer	AEC2019
	56	Edge Saddle	AEC2023
	57	Mini Clamp	AEC2024
	58	Gasket SP (SX)	ANK1763
	59	Gasket (HDMI)	ANK1765
	60	Gasket FE (SX)	ANK1775
	61	Card Spacer A	BEC1120
	62	Rivet A	BEC1158
	63	Bush Holder	ABA1326
	64	•••••	
	65	Screw	ABZ30P060FTB
	66	Screw	ABZ30P100FTB
	67	Screw	AMZ30P060FTB
	68	Screw	AMZ30P080FTC
	69	Hexagon Head Screw	BBA1051
	70	Nut	BBN1005
	71	Screw	BBZ35P300FTC
	72	Screw	BPZ30P100FTB
	73	Screw	PMB30P060FNI
	74	Rear Cover	AMR3425

2.1.8 PDP SERVICE ASSY (5050) : (AWU1131)

• Exterior



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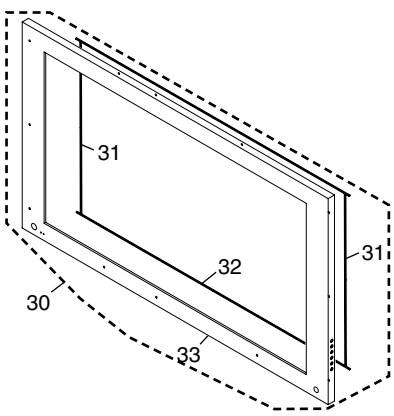
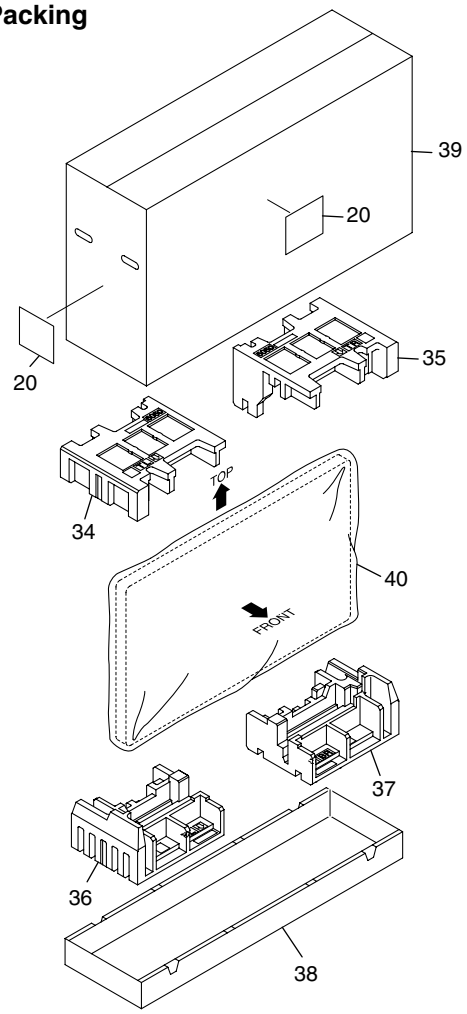


• **Packing**



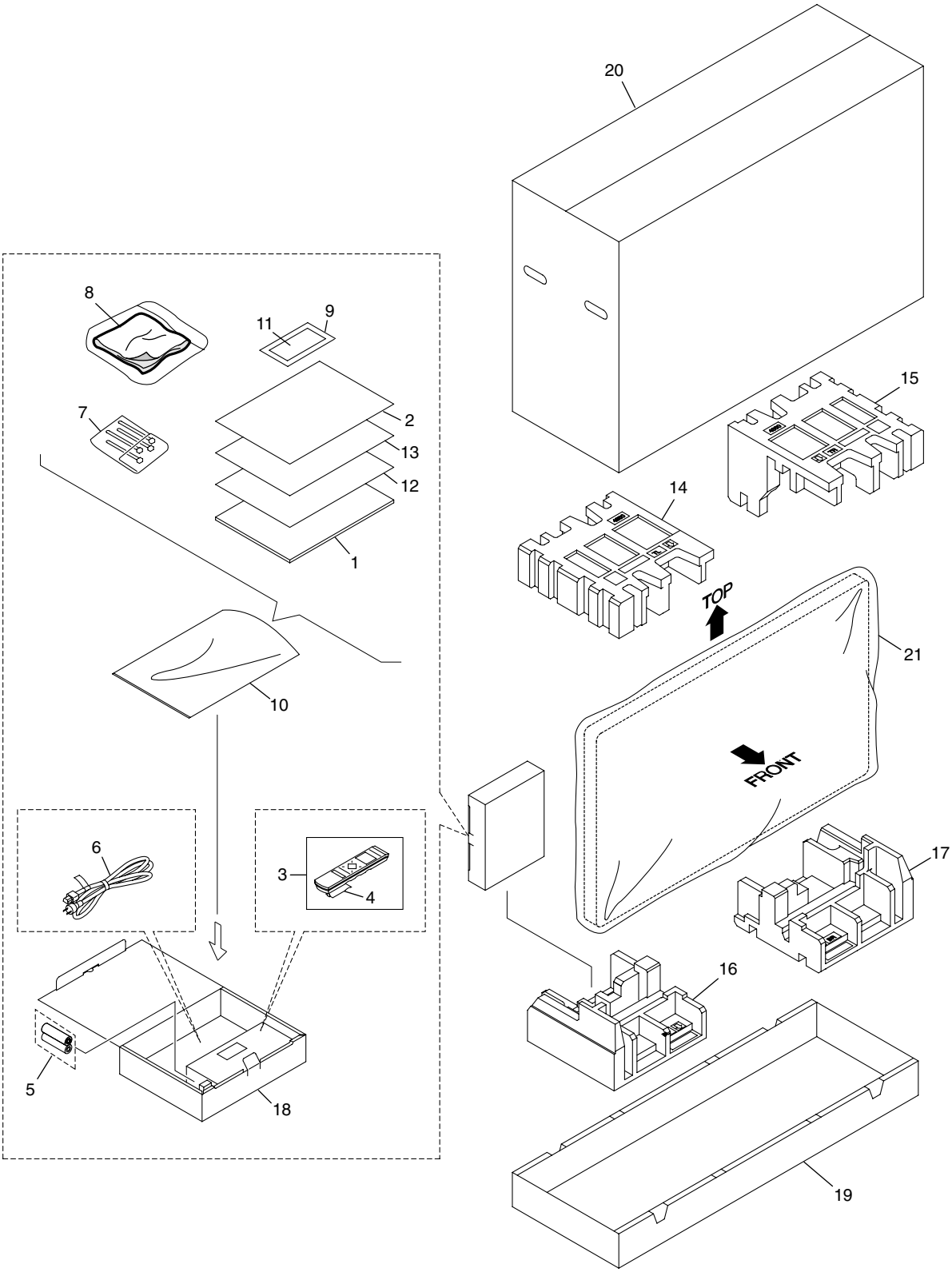
PDP SERVICE ASSY (5050): (AWU1131) PARTS LIST

Mark	No.	Description	Part No.
NSP	1	Panel Chassis (5050)Assy	AWU1125
	2	Front Chassis HU (50)	ANA1792
	3	Front Chassis HD (50)	ANA1793
	4	Front Chassis VL (5050)	ANA1847
	5	Front Chassis VR (5050)	ANA1848
	6	Terminal Panel L (5050)	ANG2754
	7	Terminal Panel R (5050)	ANG2755
	8	Sub Frame L Assy (5050)	ANG2758
	9	Sub Frame R Assy (5050)	ANG2759
	10	Wire Saddle	AEC1745
	11	Wire Saddle	AEC1751
	12	Circuit Board Spacer	AEC1872
	13	PCB Support	AEC1938
	14	PCB Spacer	AEC1941
	15	PCB Spacer	AEC1947
NSP	16	Card Spacer	AEC2013
	17	Toggle Fixer	AEC2021
	18	Wire Saddle	AEC2031
	19	Rear Corner Label (15)	AAX3081
	20	Caution Label	AAX3031
NSP	21	Drive Voltage Label	ARW1097

Mark	No.	Description	Part No.
	22	Screw	ABA1333
	23	Screw	ABZ30P100FTB
	24	Screw	AMZ30P060FTB
	25	Screw	AMZ30P080FTC
	26	Screw	BPZ30P080FTB
	27	Screw	VBB30P080FNI
	28	Rear case (5050)	ANE1642
	29	Under Cover (5050)	ANG2744
NSP	30	Front Case Assy (505 S.V.C)	AMB2849
	31	Panel Cushion V (50)	AED1258
	32	Panel Cushion H (50)	AED1257
NSP	33	Front Case (50P)	AMB2823
	34	Pad (50T-L)	AHA2439
	35	Pad (50T-R)	AHA2440
	36	Pad (50B-L)	AHA2441
	37	Pad (50B-R)	AHA2442
	38	Under Carton (5050)	AHD3358
NSP	39	Upper Carton (5050S)	AHD3367
	40	Protect Sheet	AHG1331

2.2 PDP-4350SX

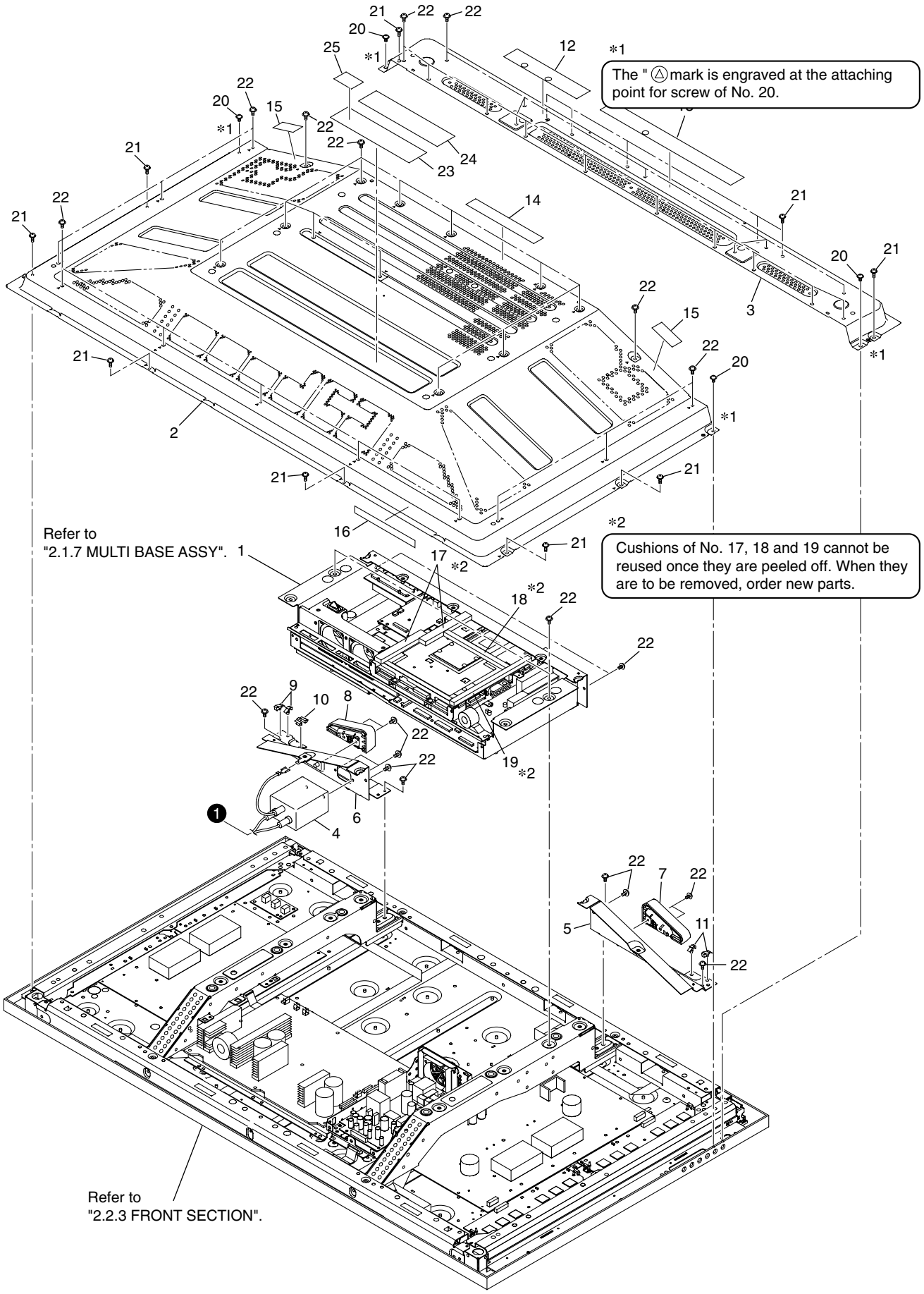
2.2.1 PACKING SECTION



PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Operating Instructions (English / French / Spanish)	ARE1394
	2	Caution	ARM1232
	3	Remote Control Unit	AXD1502
	4	Battery Cover	AZA7424
NSP	5	Dry Cell Battery	VEM1021
⚠	6	Power Cord	ADG1215
	7	Binder Assy	AEC1908
	8	Cleanning Cloth	AED1208
	9	Polyethylene Bag S	AHG1338
NSP	10	Catalogue Bag	AHG1340
NSP	11	Warranty Card	ARY1138
	12	DCR User Card	ARY1162
NSP	13	User Card	VRY1132
	14	Pad (43T-L)	AHA2435
	15	Pad (43T-R)	AHA2436
	16	Pad (43B-L)	AHA2437
	17	Pad (43B-R)	AHA2438
	18	Accessory Case (SX)	AHC1066
	19	Carton (43)	AHD3165
	20	Upper Carton (4350)	AHD3351
	21	Mirror Mat	AHG1284

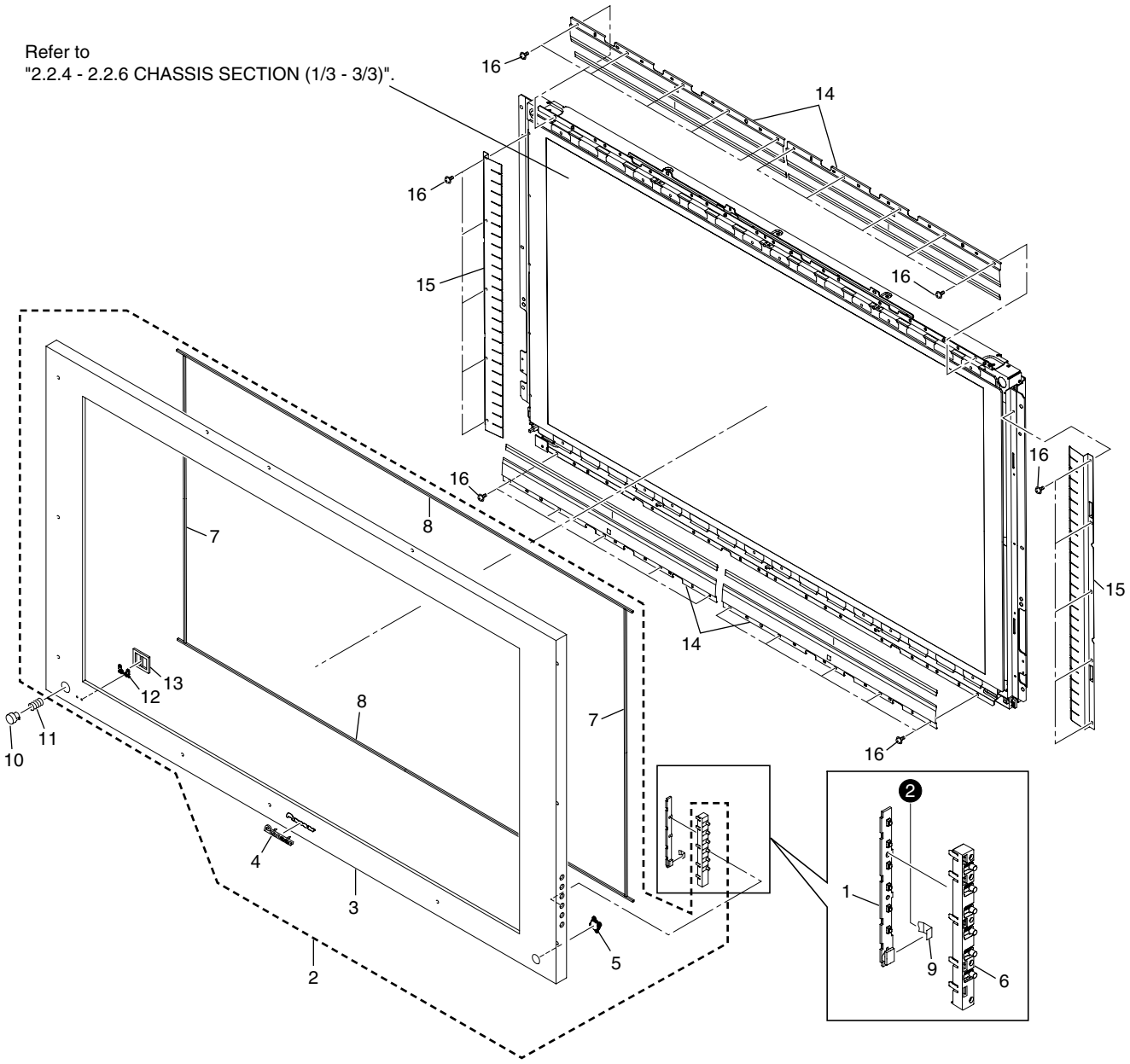
2.2.2 EXTERIOR SECTION


The " △ mark is engraved at the attaching point for screw of No. 20.
Cushions of No. 17, 18 and 19 cannot be reused once they are peeled off. When they are to be removed, order new parts.
Refer to "2.1.7 MULTI BASE ASSY".
Refer to "2.2.3 FRONT SECTION".
*1
*2

EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.
NSP	1	Multi Base Assy	AWU1122
	2	Rear Case (4350)	ANE1641
	3	Under Cover (4350)	ANG2743
⚠	4	AC Inlet	AKP1263
	5	Terminal Panel R	ANG2753
	6	Terminal Panel L	ANG2752
	7	Grip R	AMR3441
	8	Grip L	AMR3440
	9	Mini Clamp	AEC1805
	10	Edge Saddle	AEC2030
	11	Locking Wire Saddle	AEC1948
	12	Terminal Label (POW)	AAX3186
	13	Terminal Label (SX)	AAX3185
	14	Terminal Label (POD)	AAX3184
	15	Grip Label	AAX3188
	16	Serial Seal	AAX3143
	17	Cushion	AED1274
	18	Cushion	AED1273
	19	Cushion	AED1271
	20	Screw	ABA1333
	21	Screw	ABZ30P100FTB
	22	Screw	AMZ30P060FTB
NSP	23	Name Label (4350)	AAL2671
NSP	24	Caution Label	AAX3195
NSP	25	Label	VRW1629

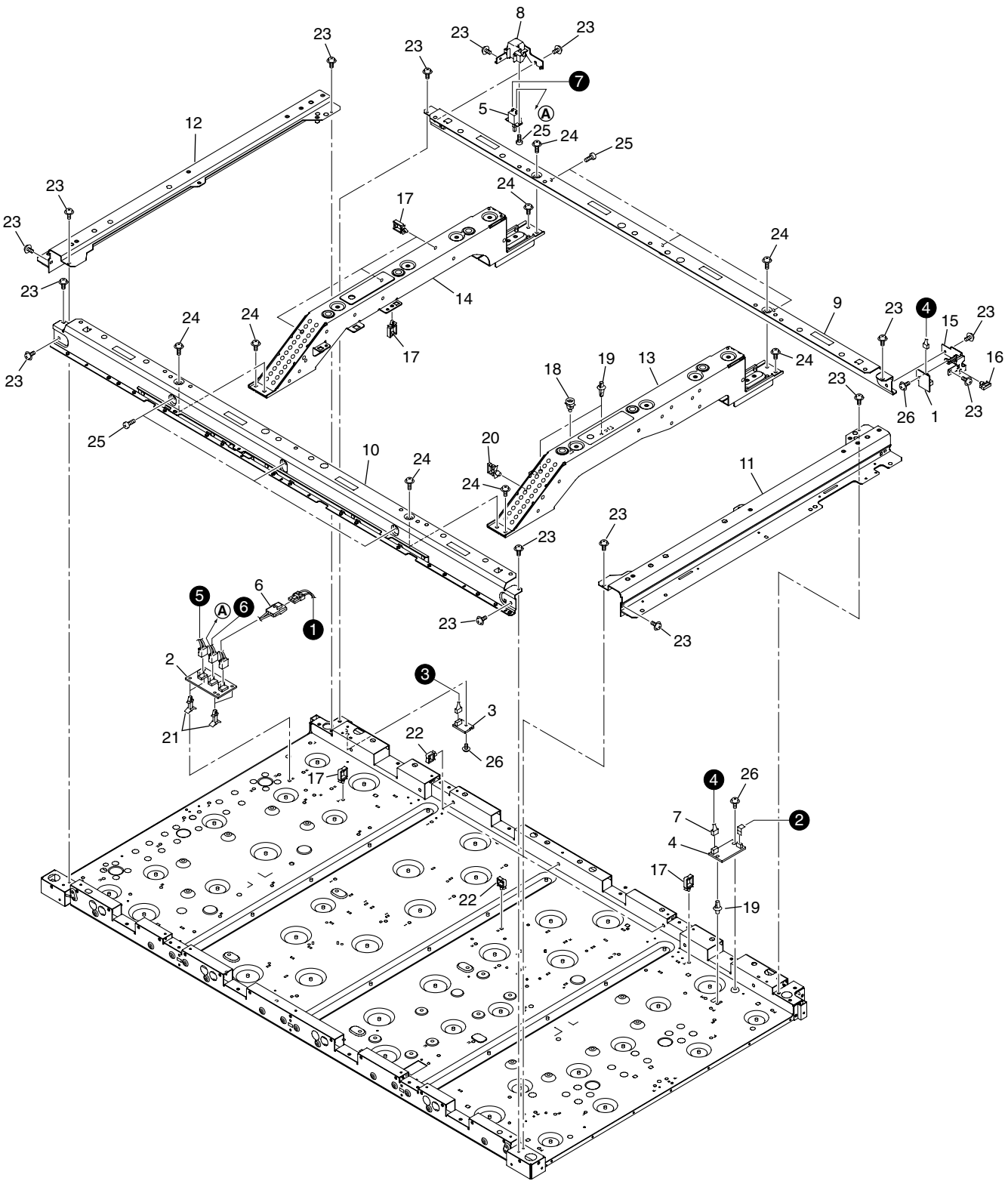
2.2.3 FRONT SECTION



FRONT SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	KEY Assy	AWW1011
	2	Front Case Assy (4350)	AMB2859
NSP	3	Front Case (43P)	AMB2821
	4	Pioneer Badge	AAM1096
NSP	5	SR Lens (P)	AAK2798
NSP	6	Function Button	AAC1555
	7	Panel Cushion V (43)	AED1256
	8	Panel Cushion H (43)	AED1255
	9	Flexible Flat Cable (J211)	ADD1225
	10	Power Button	AAD4127
	11	Coil Spring	ABH1114
NSP	12	LED Lens (P)	AAK2799
	13	Blind Cushion	AEB1383
	14	Panel Holder H Assy (43)	ANG2674
	15	Panel Holder V (43)	ANG2661
	16	Screw	ABZ30P060FTC

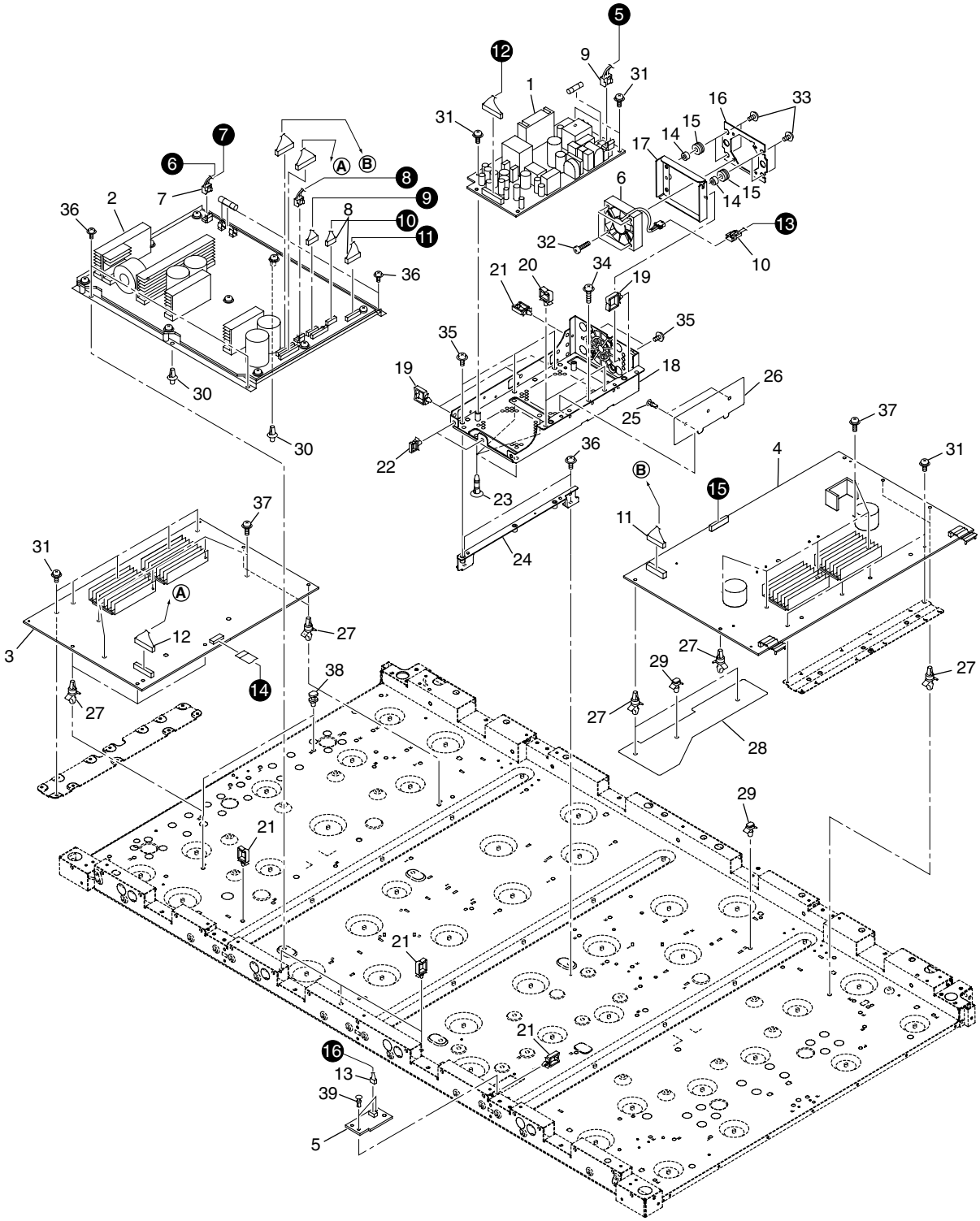
2.2.4 CHASSIS SECTION (1/3)



CHASSIS SECTION (1/3) PARTS LIST

Mark	No.	Description	Part No.
	1	PANEL IR Assy	AWZ6845
	2	AC SEPA Assy	AWV1010
	3	PLED Assy	AWW1009
	4	KEY CONTROL Assy	AWZ6844
⚠	5	Power Switch (S1)(POWER)	ASG1092
	6	Housing Wire A (J226)	ADX3101
	7	11P Housing Wire (J225)	ADX3100
	8	Switch Holder	AMR3402
	9	Front Chassis HD Assy (43)	ANA1788
	10	Front Chassis HU Assy (43)	ANA1787
	11	Front Chassis VL (4350)	ANA1845
	12	Front Chassis VR (4350)	ANA1846
	13	Sub Frame L Assy (4350)	ANG2756
	14	Sub Frame R Assy (4350)	ANG2757
	15	IR Holder	ANG2665
	16	Locking Wire Saddle	AEC1948
	17	Wire Saddle	AEC1745
	18	Toggle Fixer	AEC2021
	19	PCB Spacer	AEC1947
	20	Wire Saddle	AEC2031
	21	Circuit Board Spacer	AEC1872
	22	Wire Saddle	AEC1751
	23	Screw	AMZ30P060FTB
	24	Screw	AMZ30P080FTC
	25	Screw	BPZ30P080FTB
	26	Screw	ABZ30P060FTC

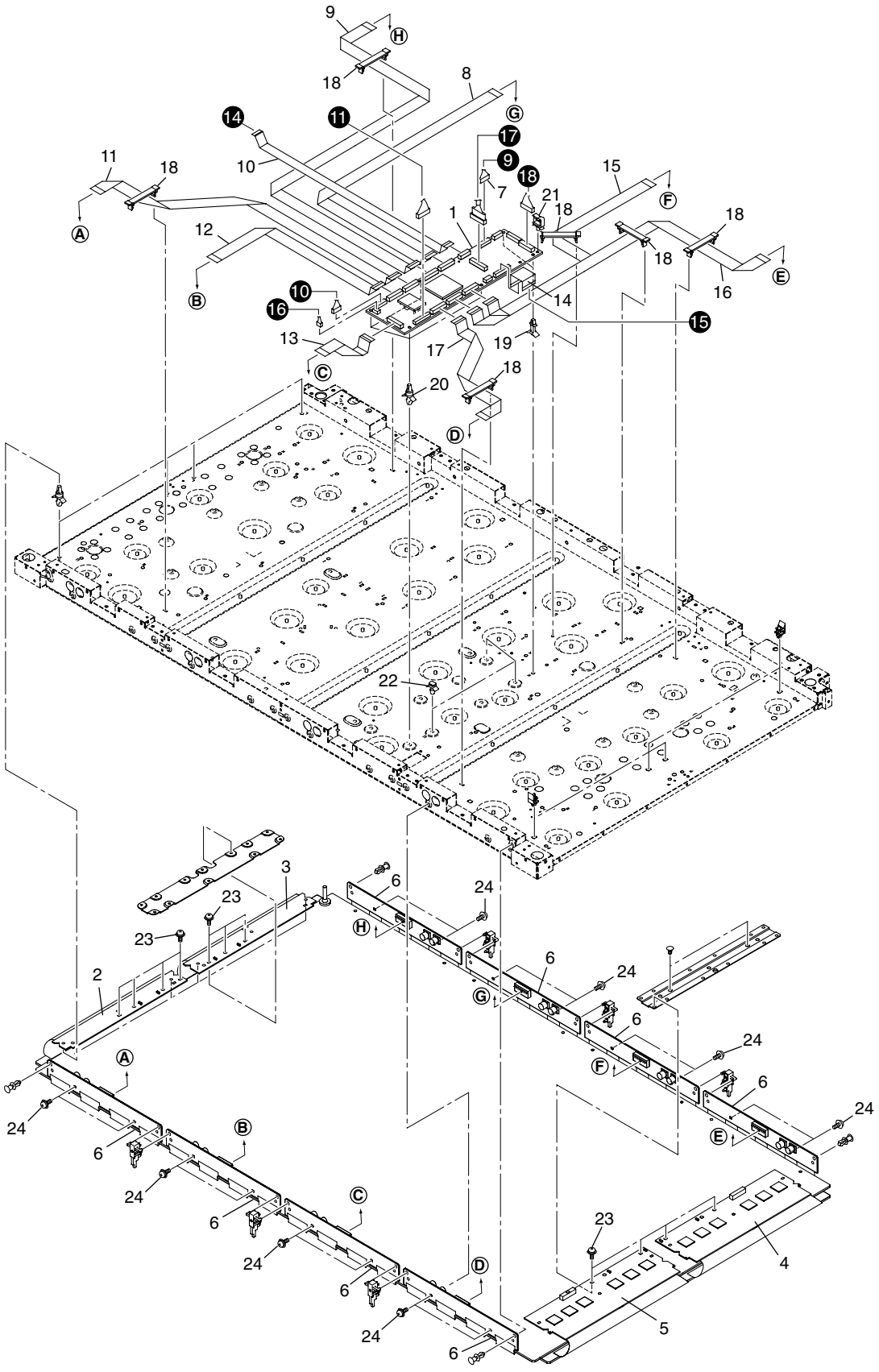
2.2.5 CHASSIS SECTION (2/3)



CHASSIS SECTION (2/3) PARTS LIST

Mark	No.	Description	Part No.
⚠	1	MR POWER SUPPLY Unit	AXY1091
⚠	2	PANEL POWER SUPPLY Unit	AXY1107
	3	43 X DRIVE Assy	AWZ6991
	4	43 Y DRIVE Assy	AWV2179
	5	PANEL SENSOR Assy	AWZ6872
	6	Fan Motor	AXM1043
	7	Housing Wire (J230)	ADX3103
	8	8P,9P Housing Wire (J101)	ADX3098
	9	Housing Wire (J229)	ADX3102
	10	3P Housing Wire (J231)	ADX3104
	11	11P Housing Wire (J102)	ADX2840
	12	12P Housing Wire (J103)	ADX2921
	13	3P Housing Wire (J109)	ADX2847
	14	Bush Holder	ABA1326
	15	Insulation Bush	AEB1408
	16	MR Fan Plate	ANG2750
	17	MR Fan Holder	ANG2751
	18	MR Power Supply Chassis	ANA1849
	19	Wire Saddle	AEC1797
	20	Wire Saddle	AEC1751
	21	Wire Saddle	AEC1745
	22	Wire Saddle	AEC2031
	23	PCB Holder	AEC1097
	24	MR Power Supply Stay	ANG2779
	25	Nylon Rivet	AEC2020
	26	MR Power Supply Insulation Sheet	AMR3467
	27	PCB Spacer	AEC1941
	28	Y Drive Protection Sheet	AMR3346
	29	PCB Support	AEC1938
	30	PCB Spacer	AEC1947
	31	Screw	PMB30P060FNI
	32	Screw	BBZ35P200FTC
	33	Screw	ABZ30P100FTB
	34	Screw	APZ40P160FTB
	35	Screw	AMZ30P060FTB
	36	Screw	ABZ30P060FTC
	37	Screw	VBB30P080FNI
	38	Card Spacer	AEC2013
	39	Nylon Rivet	AEC1671

2.2.6 CHASSIS SECTION (3/3)

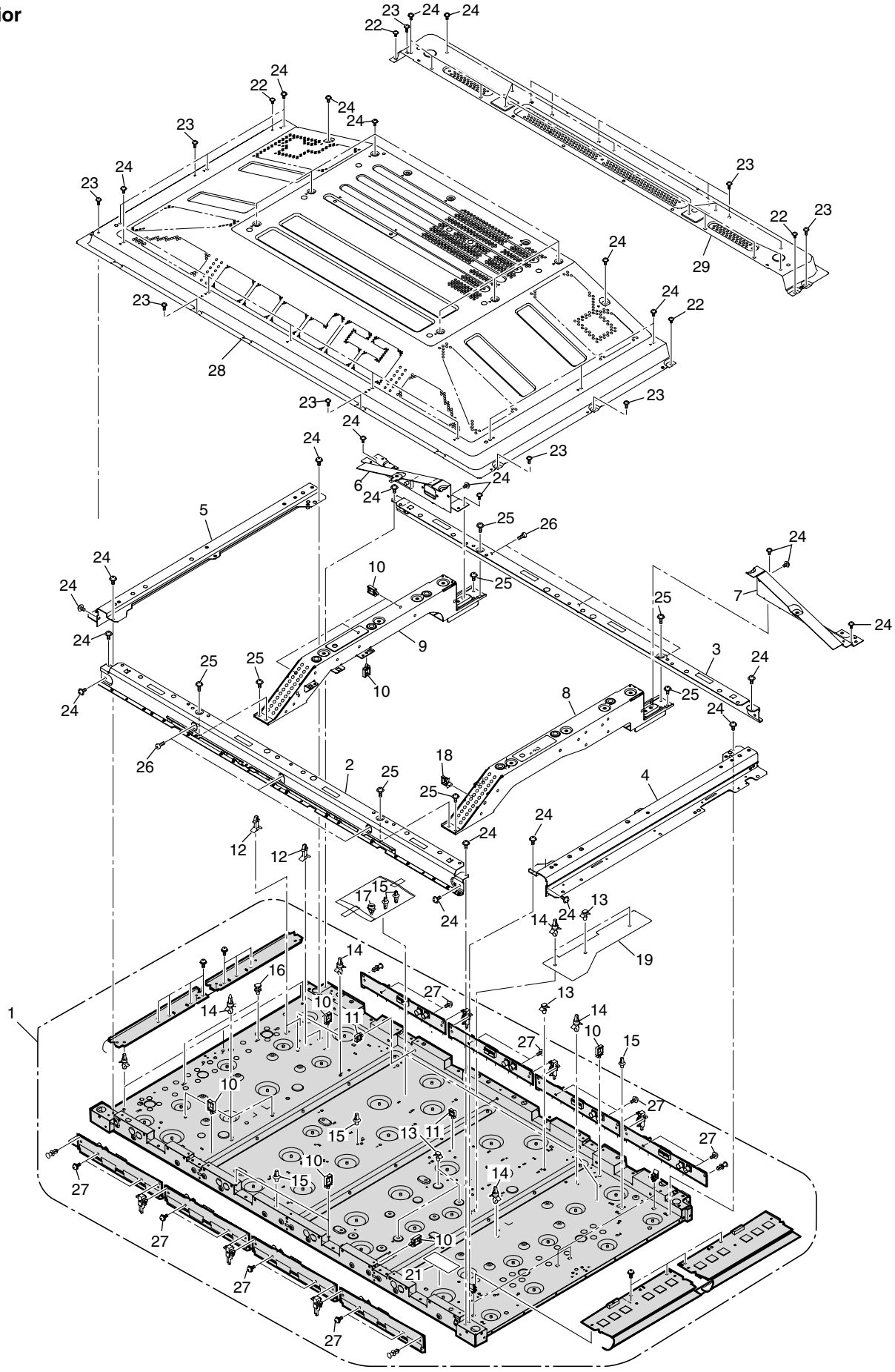


CHASSIS SECTION (3/3) PARTS LIST

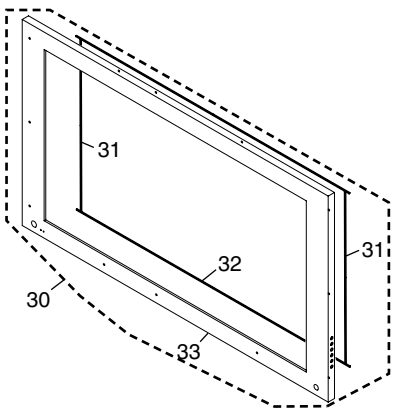
Mark	No.	Description	Part No.
	1	DIGITAL VIDEO Assy	AWV2181
NSP	2	X CONNECTOR A Assy	AWZ6875
NSP	3	X CONNECTOR B Assy	AWZ6876
NSP	4	43 SCAN A Assy	AWZ6873
NSP	5	43 SCAN B Assy	AWZ6874
NSP	6	43 ADDRESS assy	AWZ6862
	7	8P,9P Housing Wire (J218)	ADX3099
	8	Flexible Flat Cable (J207)	ADD1221
	9	Flexible Flat Cable (J208)	ADD1284
	10	Flexible Flat Cable (J210)	ADD1224
	11	Flexible Flat Cable (J204)	ADD1218
	12	Flexible Flat Cable (J203)	ADD1217
	13	Flexible Flat Cable (J202)	ADD1227
	14	Flexible Flat Cable (J209)	ADD1223
	15	Flexible Flat Cable (J206)	ADD1291
	16	Flexible Flat Cable (J205)	ADD1219
	17	Flexible Flat Cable (J201)	ADD1215
	18	Flat Clamp	AEC1879
	19	Circuit Board Spacer	AEC1872
	20	PCB Spacer	AEC1941
	21	Mini Clamp	AEC2024
	22	PCB Support	AEC1938
	23	Screw	PMB30P060FNI
	24	Screw	VBB30P080FNI

2.2.7 PDP SERVICE ASSY (4350) : (AWU1126)

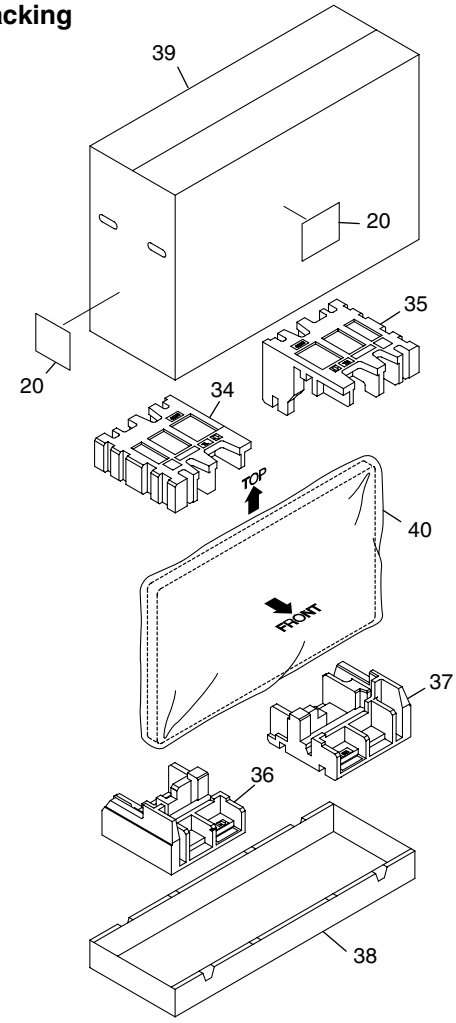
• Exterior



• **Front**



• **Packing**



PDP SERVICE ASSY (4350): (AWU1126) PARTS LIST

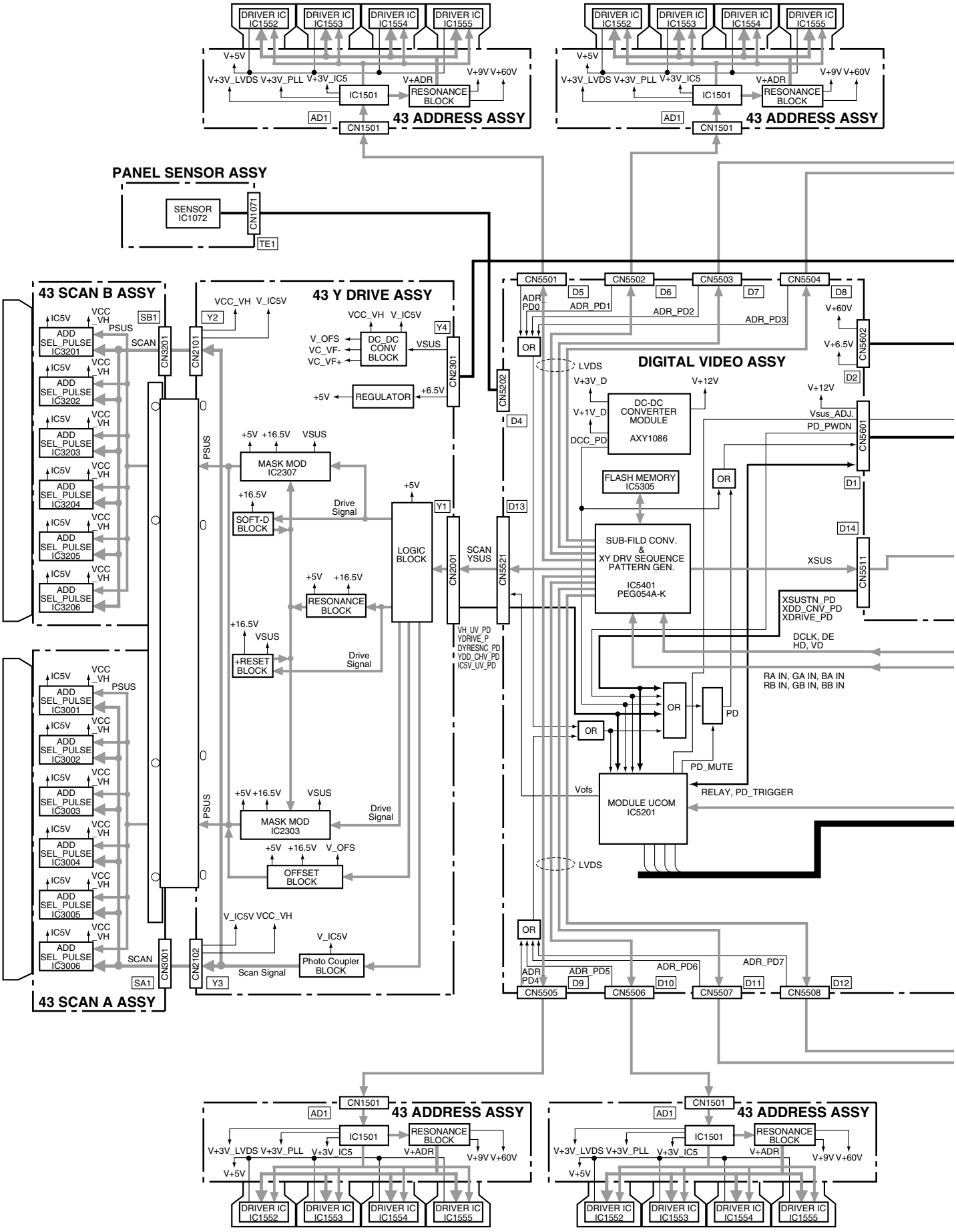
Mark	No.	Description	Part No.
NSP	1	Panel Chassis (4350)Assy	AWU1124
	2	Front Chassis HU (43)	ANA1787
	3	Front Chassis HD (43)	ANA1788
	4	Front Chassis VL (4350)	ANA1845
	5	Front Chassis VR (4350)	ANA1846
	6	Terminal Panel L (4350)	ANG2752
	7	Terminal Panel R (4350)	ANG2753
	8	Sub Frame L Assy (4350)	ANG2756
	9	Sub Frame R Assy (4350)	ANG2757
	10	Wire Saddle	AEC1745
	11	Wire Saddle	AEC1751
	12	Circuit Board Spacer	AEC1872
	13	PCB Support	AEC1938
	14	PCB Spacer	AEC1941
	15	PCB Spacer	AEC1947
NSP	16	Card Spacer	AEC2013
	17	Toggle Fixer	AEC2021
	18	Wire Saddle	AEC2031
	19	Y drive Protect Sheet	AMR3346
	20	Caution Label	AAX3031

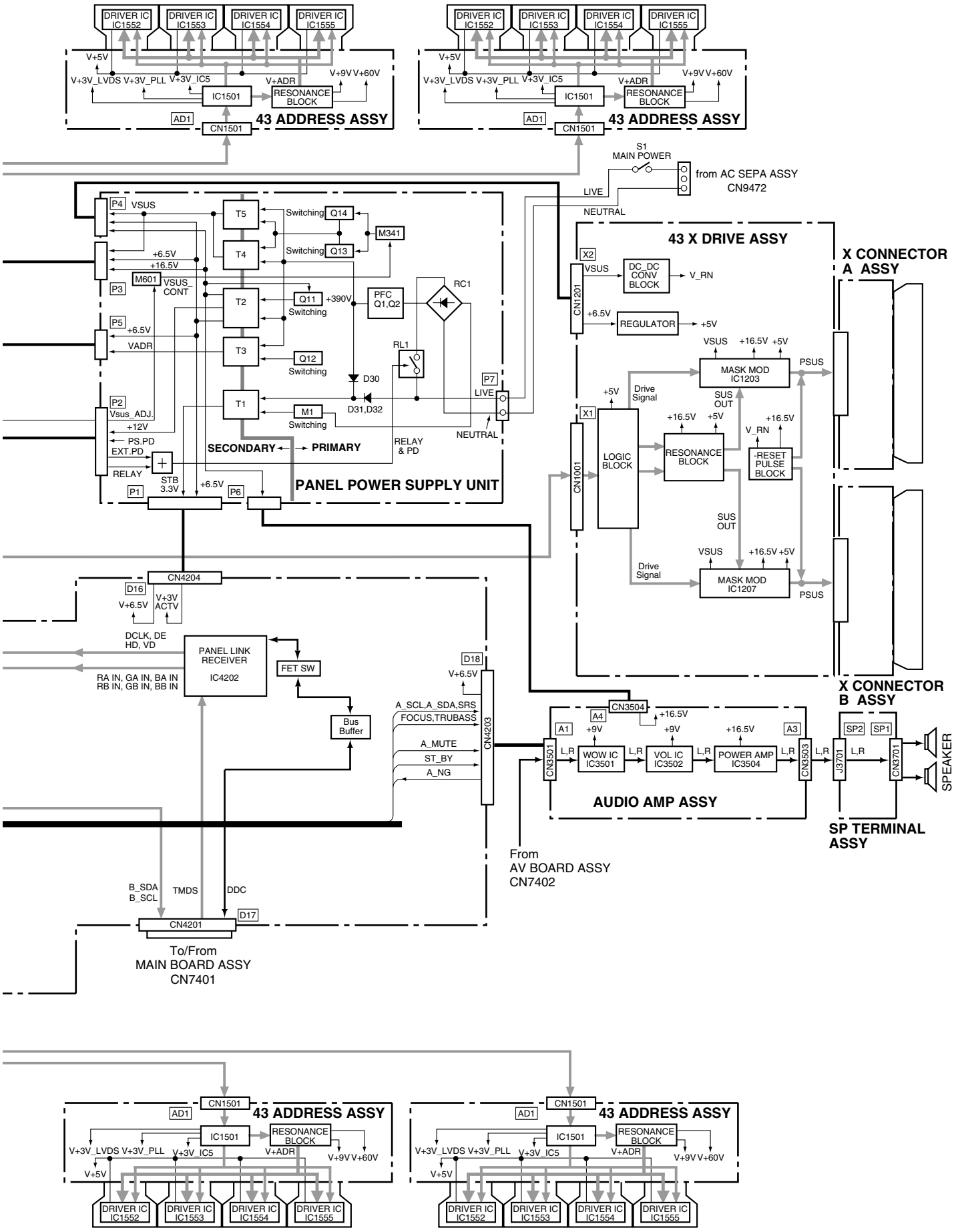
Mark	No.	Description	Part No.
NSP	21	Drive Voltage Label	ARW1097
	22	Screw	ABA1333
	23	Screw	ABZ30P100FTB
	24	Screw	AMZ30P060FTB
	25	Screw	AMZ30P080FTC
	26	Screw	BPZ30P080FTB
	27	Screw	VBB30P080FNI
	28	Rear case (4350)	ANE1641
	29	Under Cover (4350)	ANG2743
NSP	30	Front Case Assy (435 S.V.C)	AMB2841
	31	Panel Cushion V (43)	AED1256
	32	Panel Cushion H (43)	AED1255
NSP	33	Front Case (43P)	AMB2821
	34	Pad (43T-L)	AHA2435
	35	Pad (43T-R)	AHA2436
	36	Pad (43B-L)	AHA2437
	37	Pad (43B-R)	AHA2438
	38	Carton (43)	AHD3165
NSP	39	Upper Carton (4350S)	AHD3366
	40	Protect Sheet	AHG1331

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

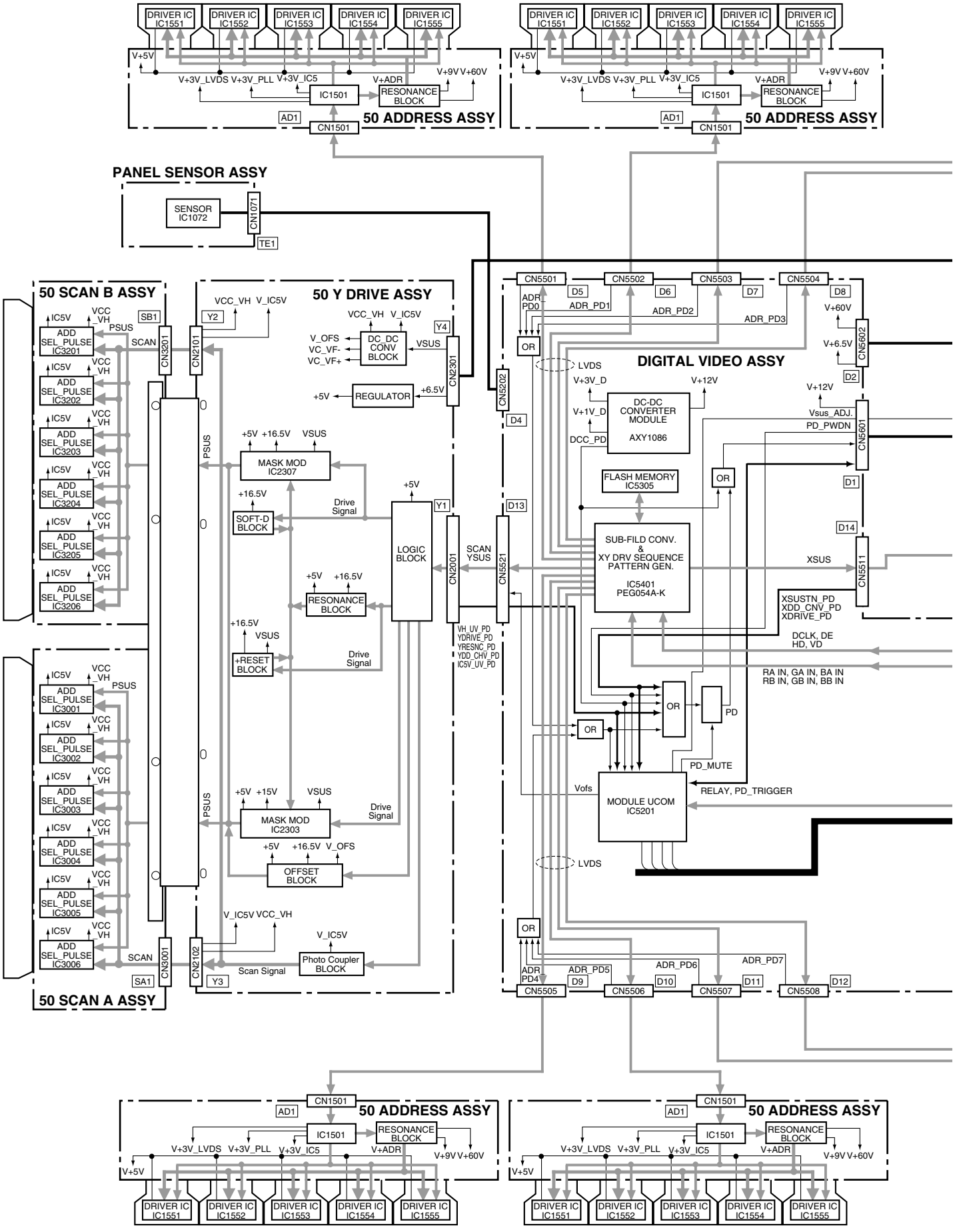
3.1 BLOCK DIAGRAM

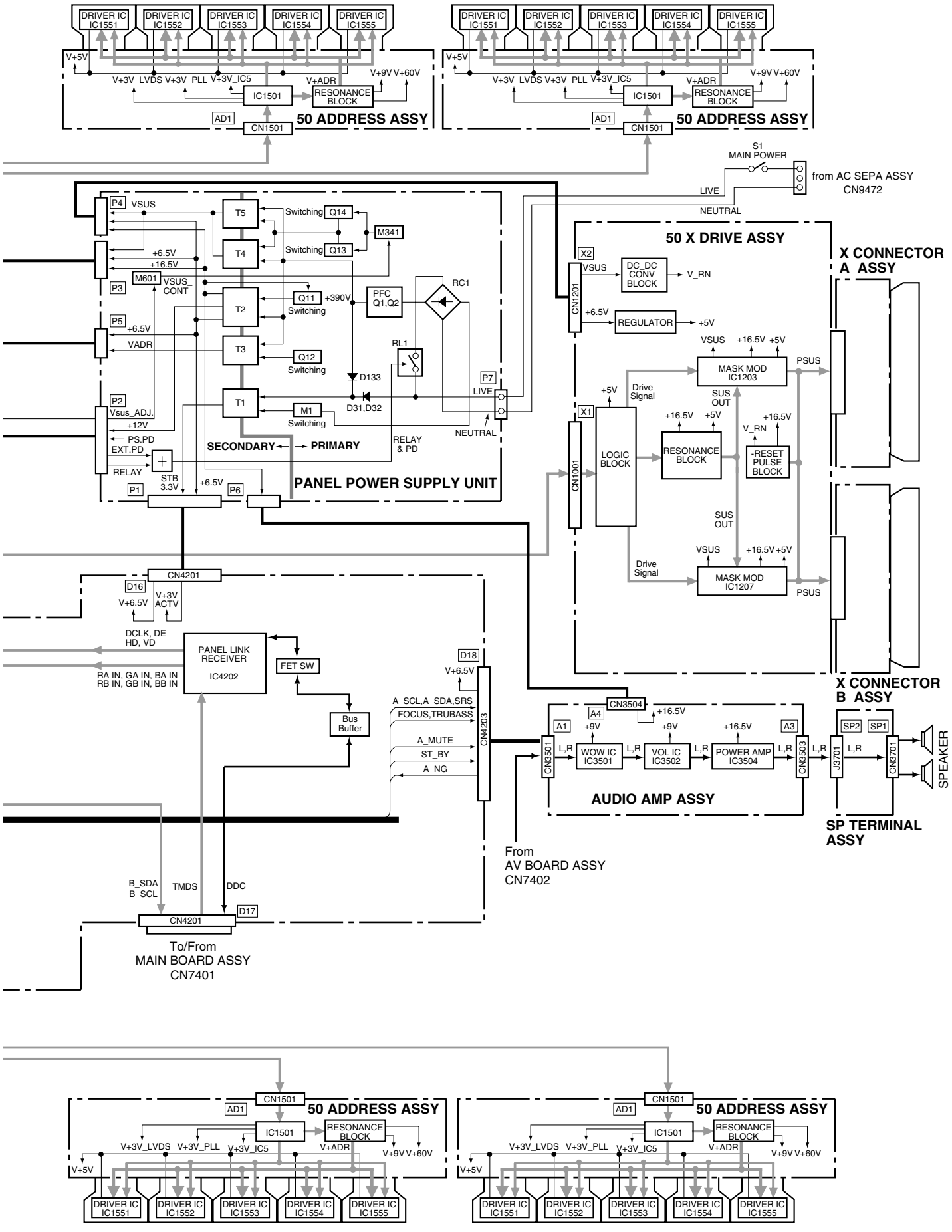
3.1.1 OVERALL BLOCK DIAGRAM (1/2) FOR PDP-4350SX



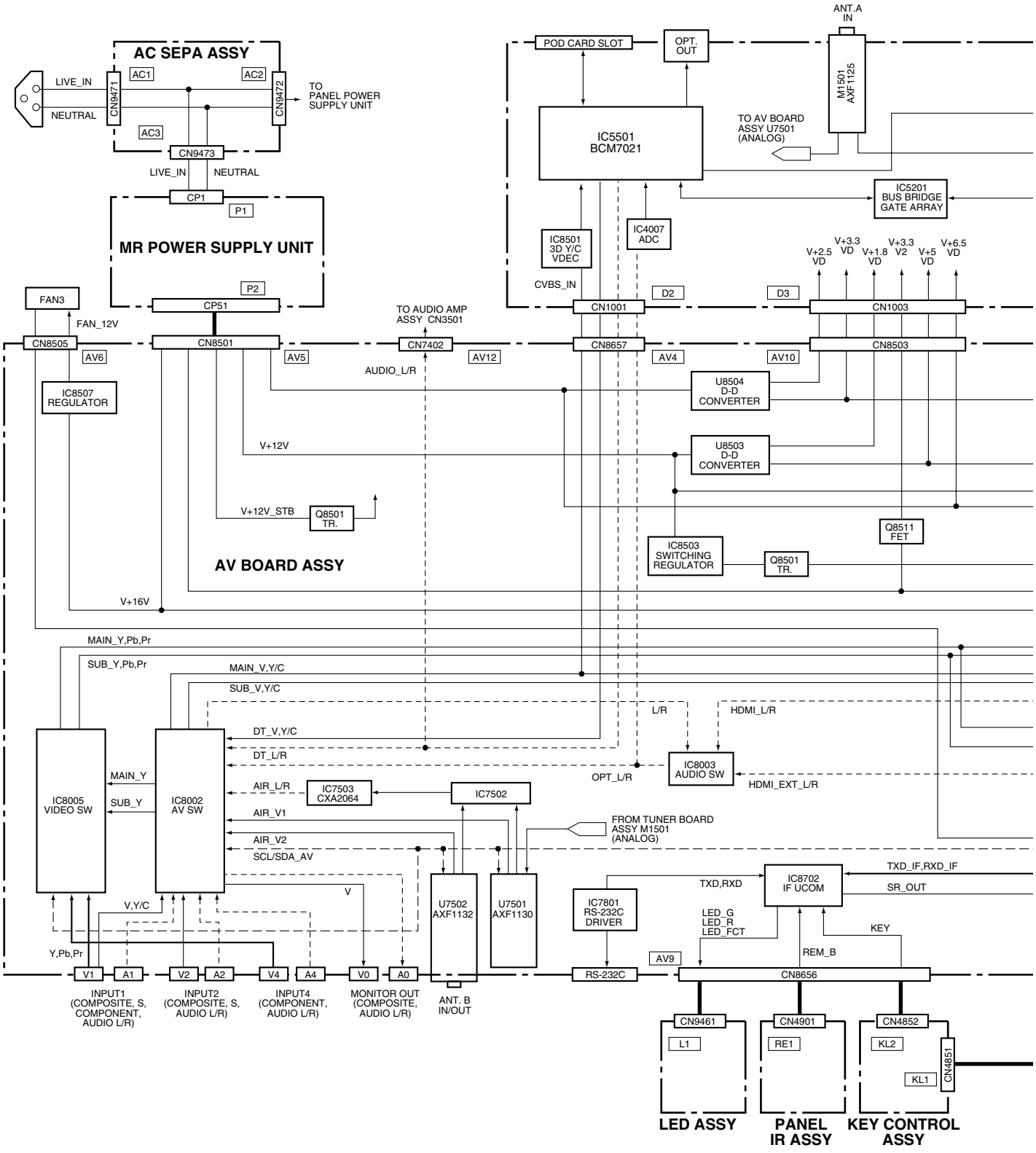

DRIVER IC IC1552
DRIVER IC IC1553
DRIVER IC IC1554
DRIVER IC IC1555
V+5V
V+3V_LVDS V+3V_PLL V+3V_IC5
V+ADR
V+9V V+60V
IC1501
RESONANCE BLOCK
AD1
CN1501
43 ADDRESS ASSY
S1
MAIN POWER
from AC SEPA ASSY
CN9472
LIVE
NEUTRAL
P4 VSUS
T5
Switching Q14
M341
T4
Switching Q13
+6.5V
+16.5V
M601 VSUS CONT
P3
T2
Q11 +390V
Switching
PFC Q1,Q2
RC1
P5 +6.5V
VADR
T3
Q12
Switching
RL1
D30
P2 Vsus_ADJ.
+12V
PS.PD
EXT.PD
RELAY
T1
M1
Switching
D31,D32
P7 LIVE
NEUTRAL
SECONDARY
PRIMARY
RELAY & PD
STB 3.3V
+6.5V
P1
P6
PANEL POWER SUPPLY UNIT
43 X DRIVE ASSY
X2
VSUS
DC_DC CONV BLOCK
V_RN
CN1201
+6.5V
REGULATOR
+5V
X CONNECTOR A ASSY
VSUS
+16.5V
+5V
MASK MOD IC1203
PSUS
+5V
Drive Signal
SUS OUT
X1
CN1001
LOGIC BLOCK
+16.5V
+5V
RESONANCE BLOCK
+16.5V
V_RN
-RESET PULSE BLOCK
SUS OUT
VSUS
+16.5V
+5V
Drive Signal
MASK MOD IC1207
PSUS
X CONNECTOR B ASSY
CN4204
D16
V+6.5V
V+3V ACTV
DCLK, DE
HD, VD
RA IN, GA IN, BA IN
RB IN, GB IN, BB IN
PANEL LINK RECEIVER
IC4202
FET SW
Bus Buffer
D18
V+6.5V
A_SCL,A_SDA,SRS
FOCUS,TRUBASS
A_MUTE
ST_BY
A_NG
CN4203
CN3504
A4
+16.5V
A1
+9V
CN3501
L,R
WOW IC IC3501
VOL IC IC3502
POWER AMP IC3504
CN3503
J3701
SP2
SP1
CN3701
SPEAKER
AUDIO AMP ASSY
SP TERMINAL ASSY
From AV BOARD ASSY CN7402
B_SDA
B_SCL
TMDS
DDC
D17
CN4201
To/From MAIN BOARD ASSY CN7401

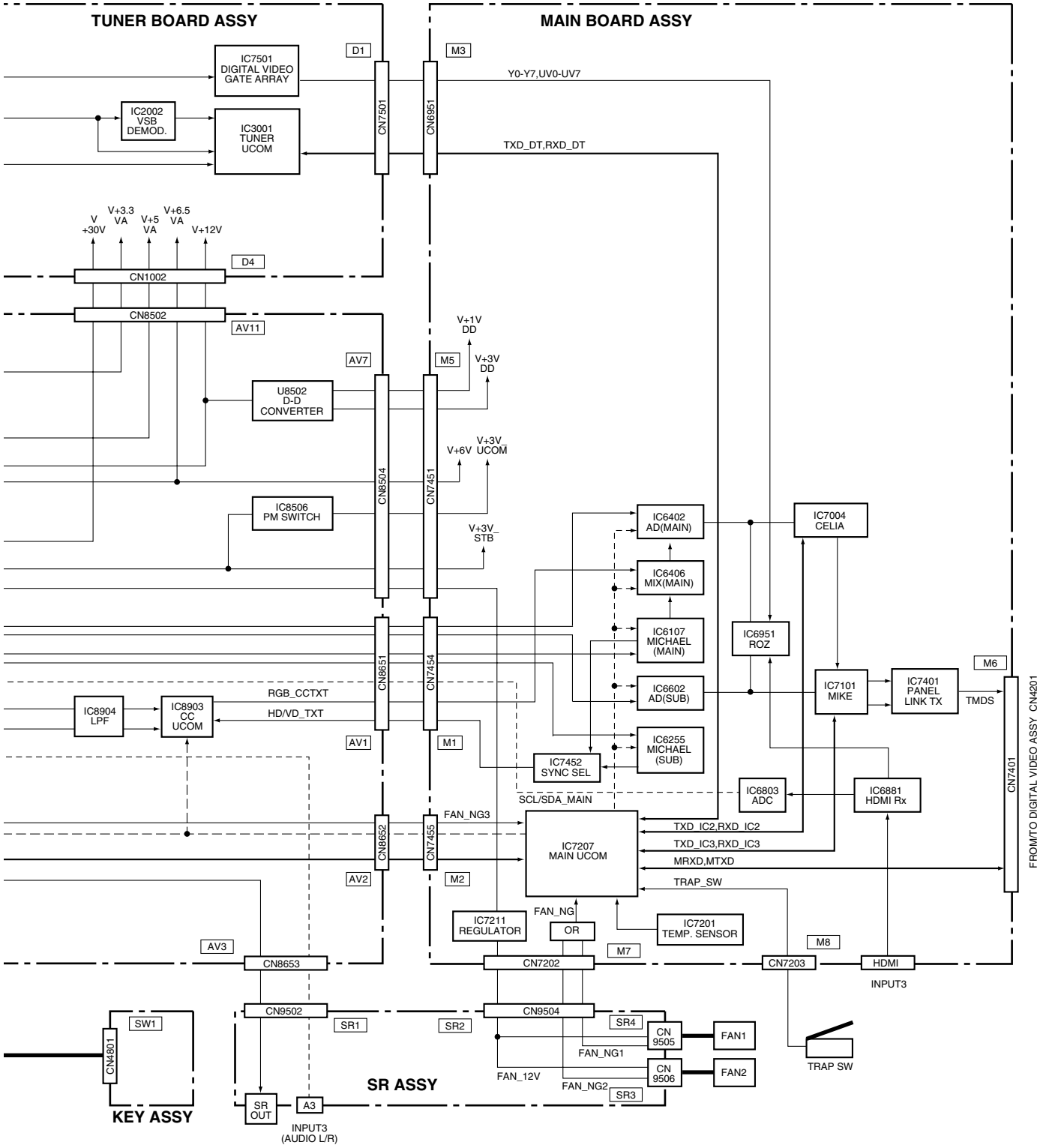
3.1.2 OVERALL BLOCK DIAGRAM (1/2) FOR PDP-5050SX




DRIVER IC IC1551
DRIVER IC IC1552
DRIVER IC IC1553
DRIVER IC IC1554
DRIVER IC IC1555
V+5V
V+3V_LVDS V+3V_PLL V+3V_IC5
V+ADR
V+9V V+60V
IC1501
RESONANCE BLOCK
AD1
CN1501
50 ADDRESS ASSY
S1
MAIN POWER
LIVE
NEUTRAL
from AC SEPA ASSY
CN9472
P4 VSUS
P3
M601 VSUS_CONT
P5 +6.5V
VADR
P2 Vsus_ADJ
+12V
PS.PD
EXT.PD
RELAY
STB 3.3V
P1
+6.5V
+16.5V
P6
T5
T4
T2
T3
T1
Switching
Q14
Q13
Q11
Q12
M1
M341
+390V
PFC Q1,Q2
RC1
RL1
D133
D31,D32
P7
LIVE
NEUTRAL
SECONDARY
PRIMARY
RELAY & PD
PANEL POWER SUPPLY UNIT
50 X DRIVE ASSY
X2
CN1201
VSUS
DC_DC CONV BLOCK
V_RN
REGULATOR
+5V
X1
CN1001
LOGIC BLOCK
Drive Signal
MASK MOD IC1203
MASK MOD IC1207
PSUS
SUS OUT
RESONANCE BLOCK
-RESET PULSE BLOCK
X CONNECTOR A ASSY
X CONNECTOR B ASSY
CN4201
D16
V+3V ACTV
DCLK, DE
HD, VD
PANEL LINK RECEIVER
IC4202
RA IN, GA IN, BA IN
RB IN, GB IN, BB IN
FET SW
Bus Buffer
D18
A_SCL,A_SDA,SRS
FOCUS,TRUBASS
A_MUTE
ST_BY
A_NG
CN4203
CN3504
A4
A1
A3
CN3501
WOW IC IC3501
VOL IC IC3502
POWER AMP IC3504
CN3503
J3701
CN3701
SP2
SP1
L,R
+9V
+16.5V
SPEAKER
AUDIO AMP ASSY
SP TERMINAL ASSY
From
AV BOARD ASSY
CN7402
B_SDA
B_SCL
TMDS
DDC
D17
To/From
MAIN BOARD ASSY
CN7401

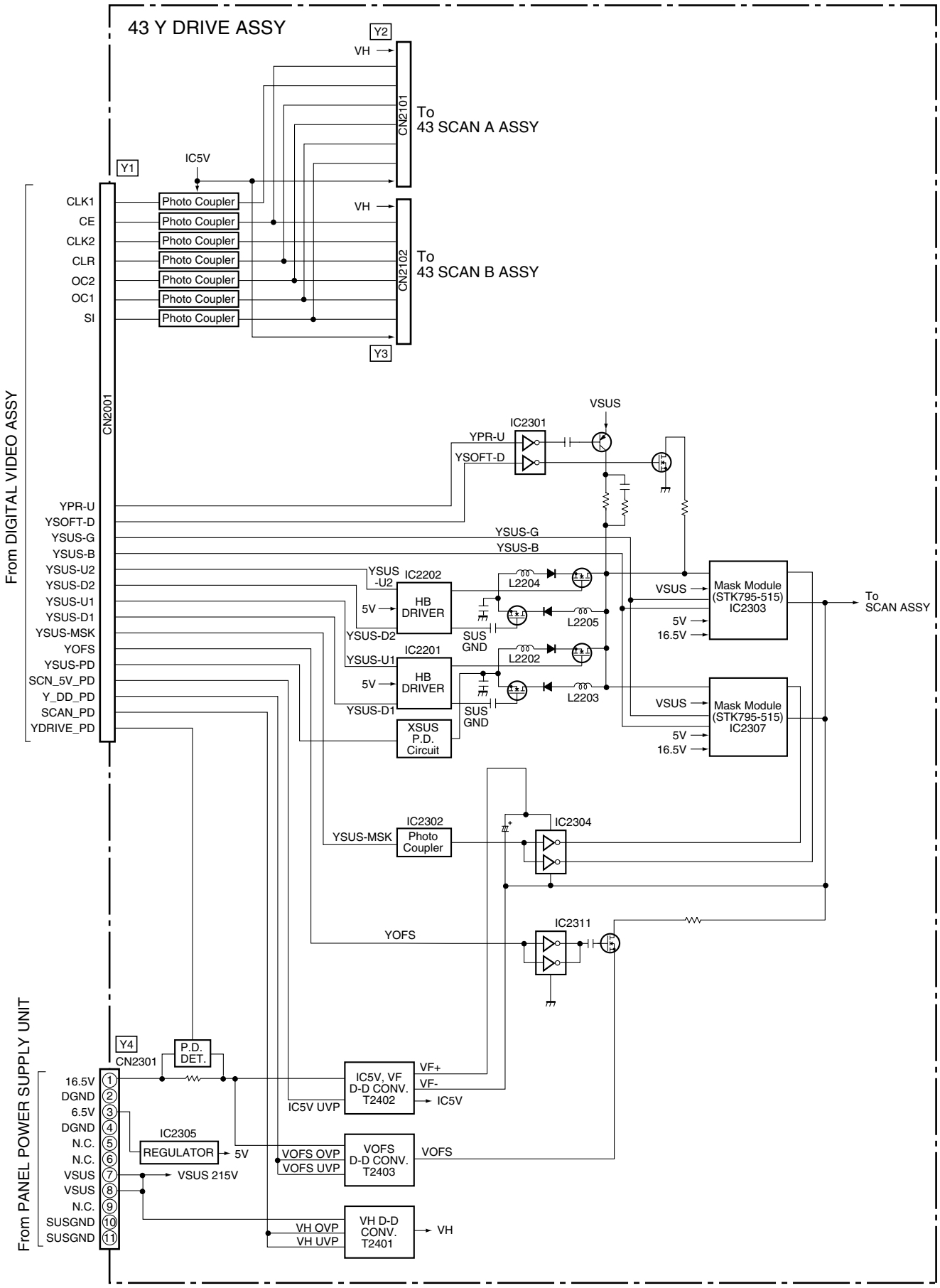
3.1.3 OVERALL BLOCK DIAGRAM (2/2)




TUNER BOARD ASSY
MAIN BOARD ASSY
IC7501 DIGITAL VIDEO GATE ARRAY
IC2002 VSB DEMOD.
IC3001 TUNER UCOM
D1
M3
CN7501
CN6951
Y0-Y7,UV0-UV7
TXD_DT,RXD_DT
V +30V
V+3.3 VA
V+5 VA
V+6.5 VA
V+12V
D4
CN1002
CN8502
AV11
AV7
M5
V+1V DD
V+3V DD
U8502 D-D CONVERTER
V+6V
V+3V_ UCOM
IC8506 PM SWITCH
V+3V_ STB
CN8504
CN7451
IC6402 AD(MAIN)
IC6406 MIX(MAIN)
IC6107 MICHAEL (MAIN)
IC6602 AD(SUB)
IC6255 MICHAEL (SUB)
IC7004 CELIA
IC6951 ROZ
IC7101 MIKE
IC7401 PANEL LINK TX
M6
TMDS
CN7401
FROM/TO DIGITAL VIDEO ASSY CN4201
CN8651
CN7454
RGB_CCTXT
HD/VD_TXT
IC8904 LPF
IC8903 CC UCOM
AV1
M1
IC7452 SYNC SEL
SCL/SDA_MAIN
IC6803 ADC
IC6881 HDMI Rx
FAN_NG3
CN8652
CN7455
IC7207 MAIN UCOM
TXD_IC2,RXD_IC2
TXD_IC3,RXD_IC3
MRXD,MTXD
TRAP_SW
AV2
M2
FAN_NG
IC7211 REGULATOR
OR
IC7201 TEMP. SENSOR
M7
M8
AV3
CN8653
CN7202
CN7203
HDMI
INPUT3
CN9502
CN9504
SW1
CN4801
SR1
SR2
SR4
CN 9505
FAN1
FAN_NG1
FAN_12V
FAN_NG2
CN 9506
FAN2
SR3
TRAP SW
SR ASSY
KEY ASSY
SR OUT
A3
INPUT3 (AUDIO L/R)

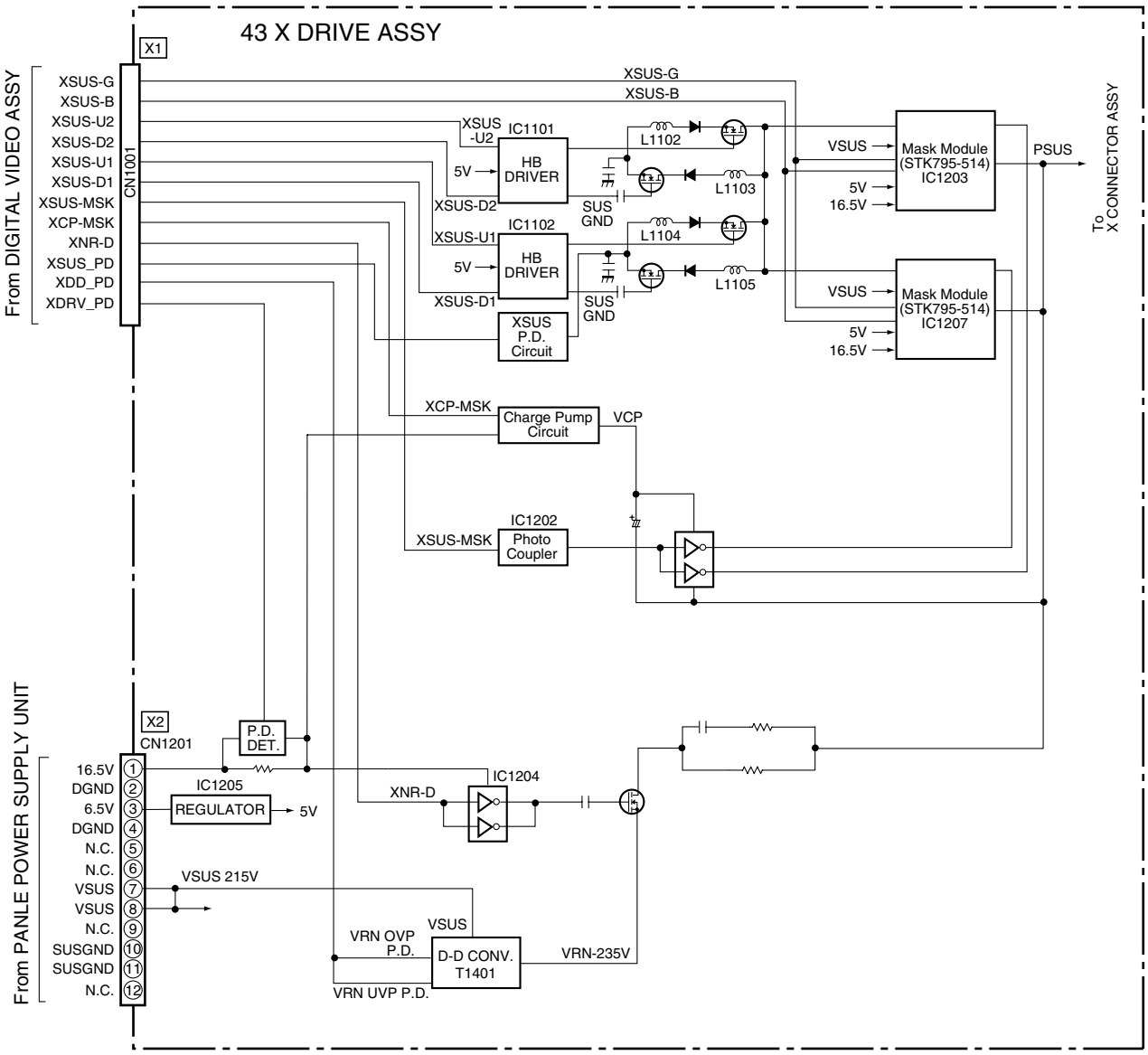
3.1.4 43 Y DRIVE ASSY

• Block Diagram



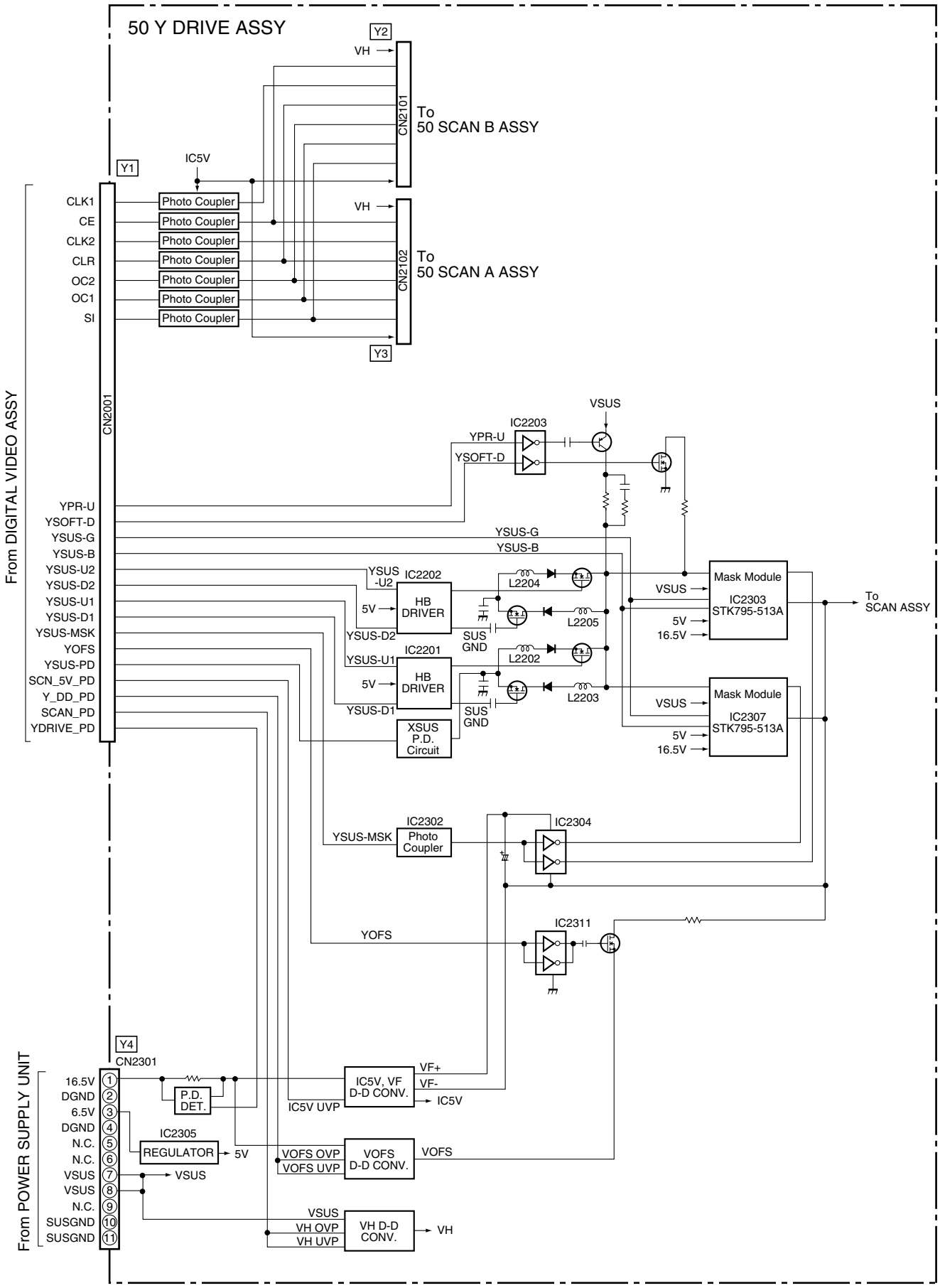
3.1.5 43 X DRIVE ASSY

• Block Diagram



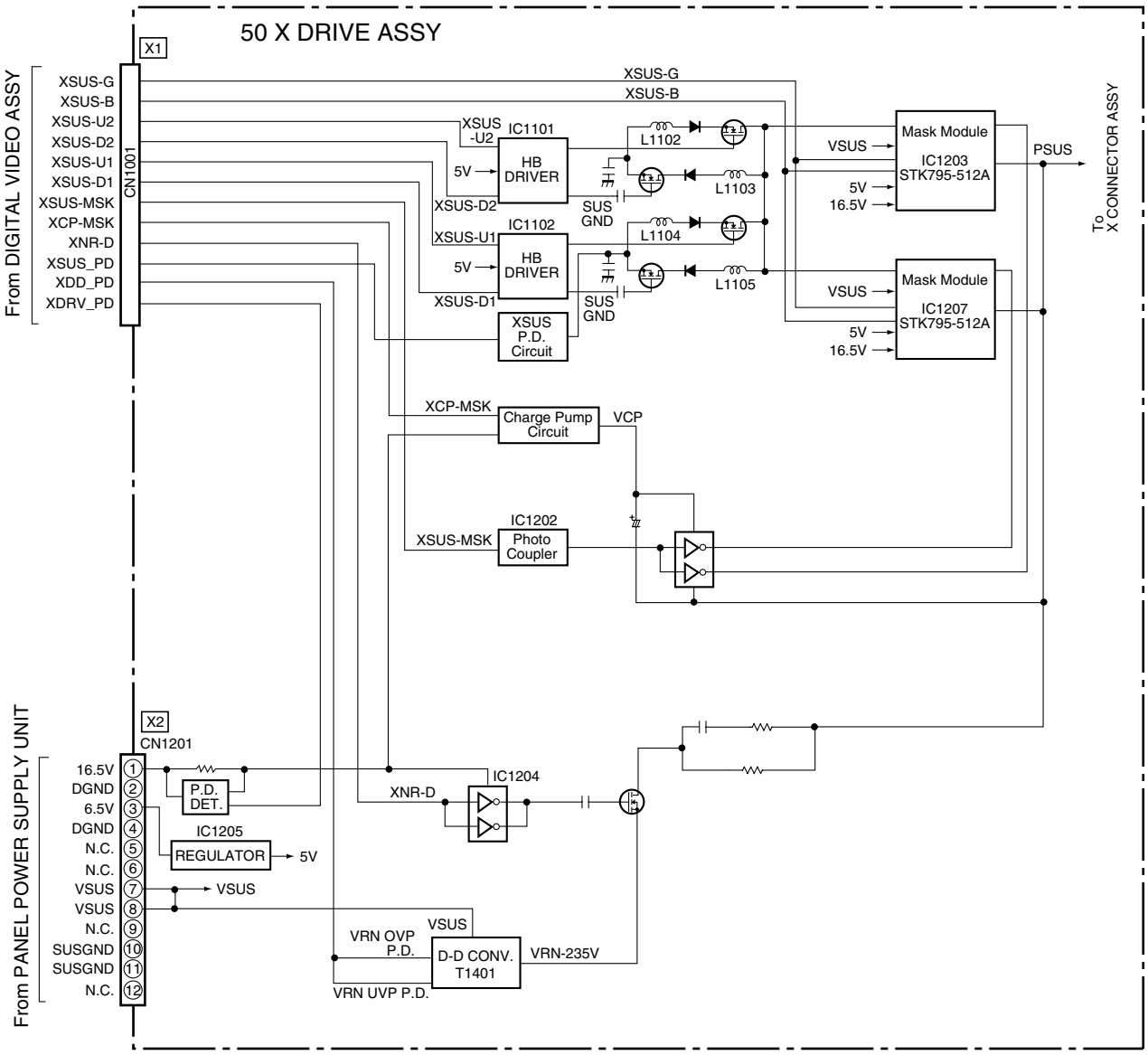
3.1.6 50 Y DRIVE ASSY

• Block Diagram



3.1.7 50 X DRIVE ASSY

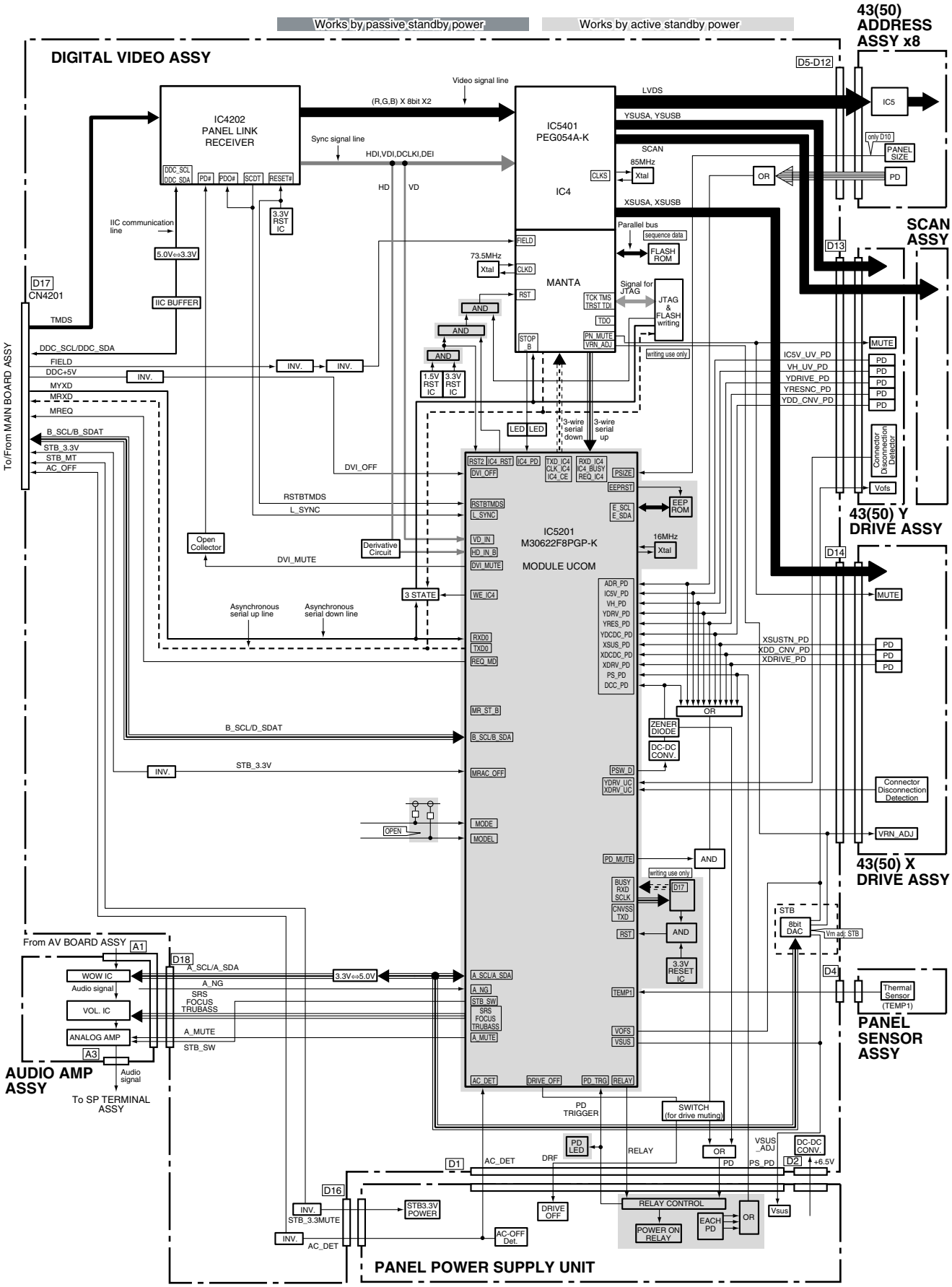
• Block Diagram



3.1.8 DIGITAL VIDEO ASSY

• Block Diagram

Note: 43(50) *** Assy means (43 *** Assy or 50 *** Assy).



A

B

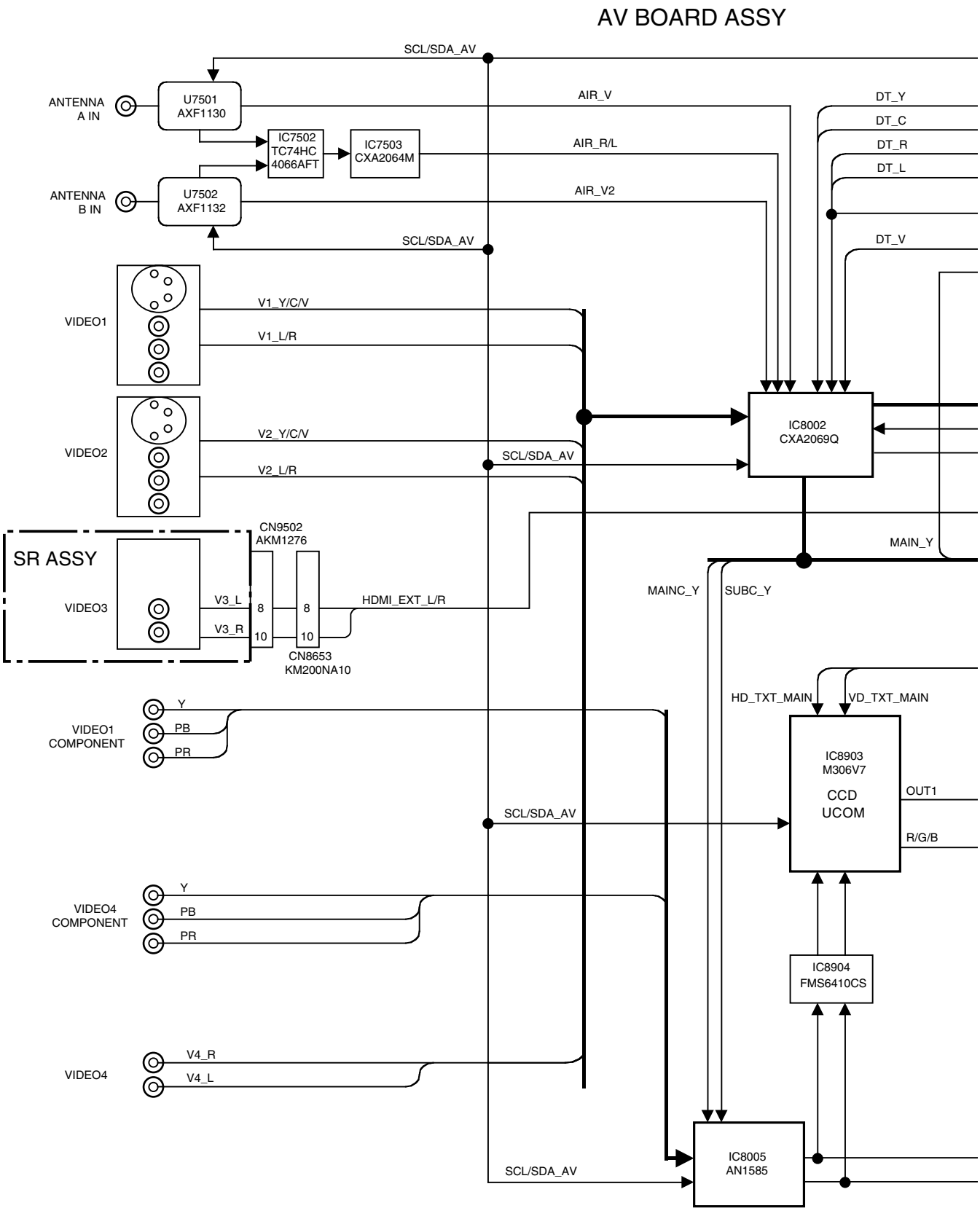
C

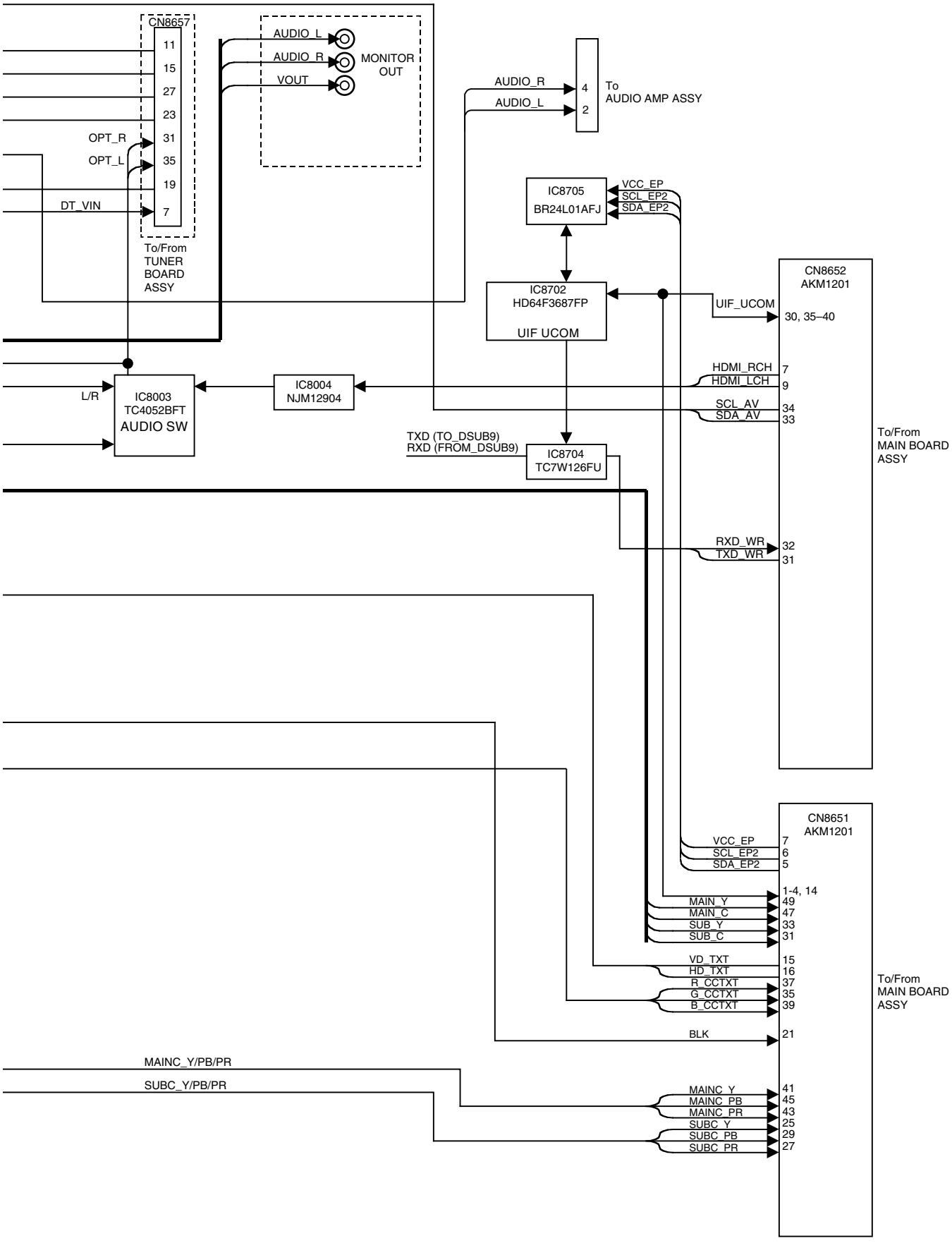
D

E

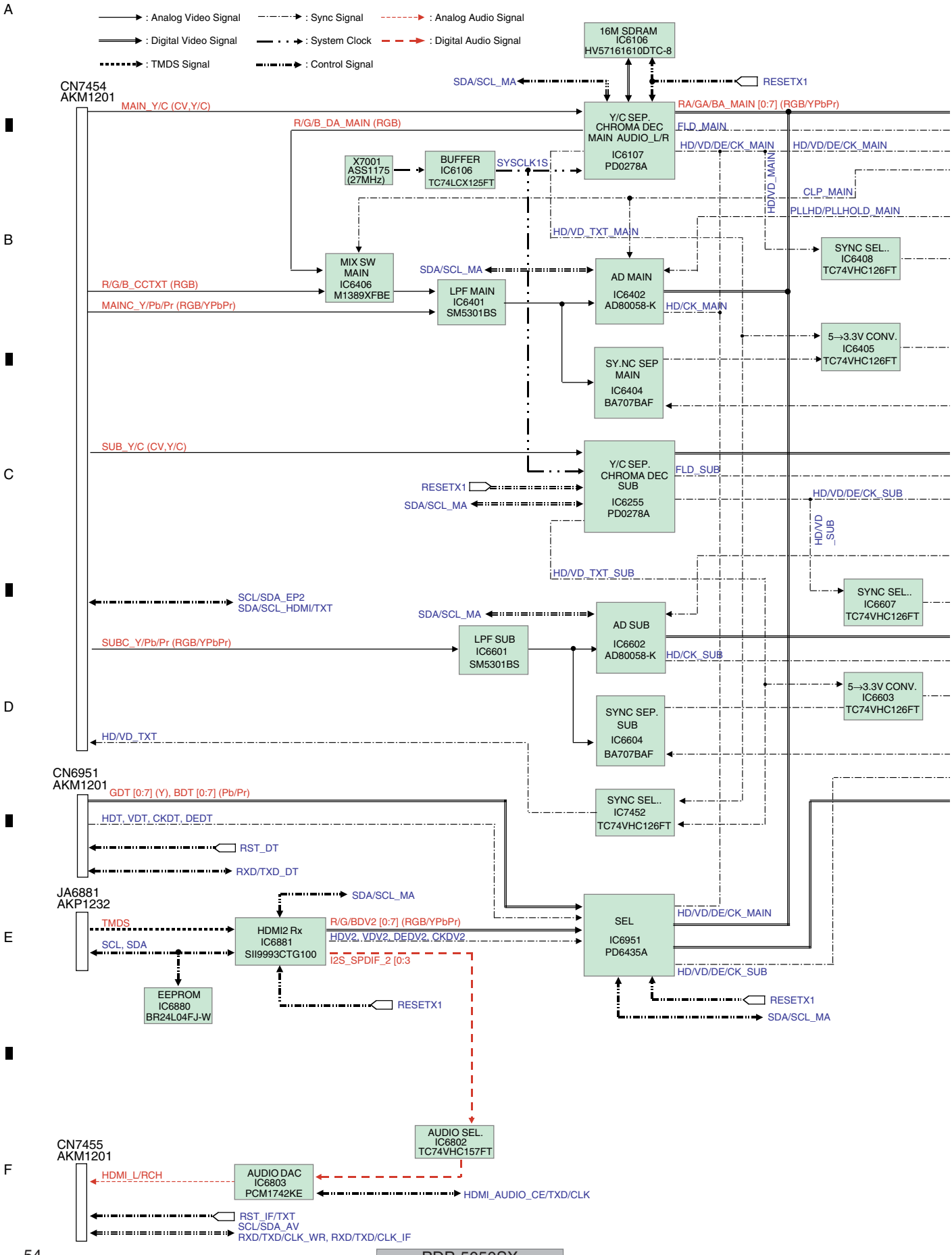
F

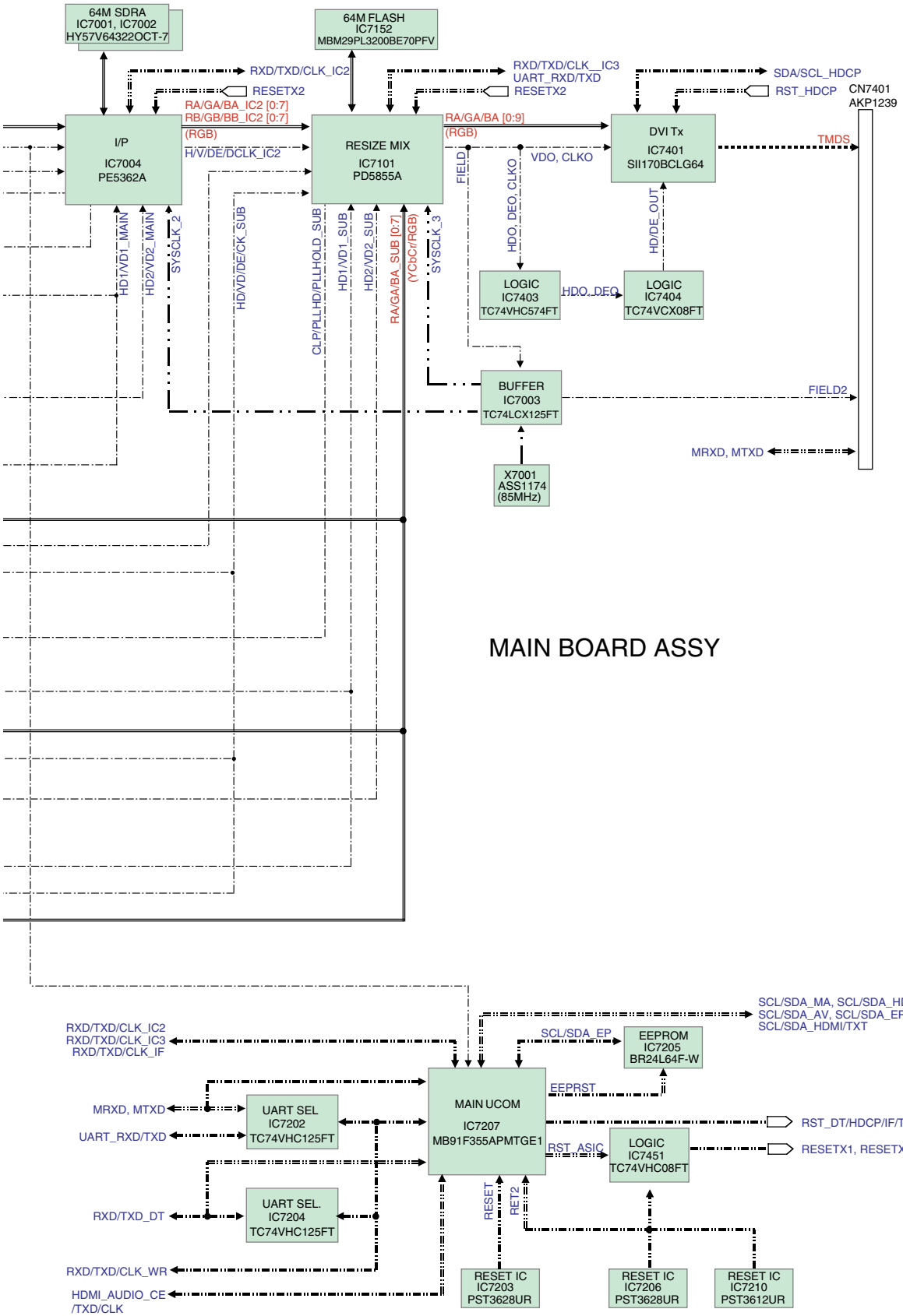
3.1.9 AV BOARD ASSY




CN8657
11
15
27
23
OPT_R
31
OPT_L
35
19
DT_VIN
7
To/From
TUNER
BOARD
ASSY
AUDIO_L
AUDIO_R
VOUT
MONITOR
OUT
AUDIO_R
AUDIO_L
4
2
To
AUDIO AMP ASSY
IC8705
BR24L01AFJ
VCC_EP
SCL_EP2
SDA_EP2
IC8702
HD64F3687FP
UIF UCOM
UIF_UCOM
30, 35–40
CN8652
AKM1201
HDMI_RCH
HDMI_LCH
7
9
SCL_AV
SDA_AV
34
33
L/R
IC8003
TC4052BFT
AUDIO SW
IC8004
NJM12904
TXD (TO_DSUB9)
RXD (FROM_DSUB9)
IC8704
TC7W126FU
RXD_WR
TXD_WR
32
31
To/From
MAIN BOARD
ASSY
CN8651
AKM1201
VCC_EP
SCL_EP2
SDA_EP2
7
6
5
1-4, 14
MAIN_Y
MAIN_C
SUB_Y
SUB_C
49
47
33
31
VD_TXT
HD_TXT
R_CCTXT
G_CCTXT
B_CCTXT
15
16
37
35
39
BLK
21
MAINC_Y/PB/PR
SUBC_Y/PB/PR
MAINC_Y
MAINC_PB
MAINC_PR
SUBC_Y
SUBC_PB
SUBC_PR
41
45
43
25
29
27
To/From
MAIN BOARD
ASSY

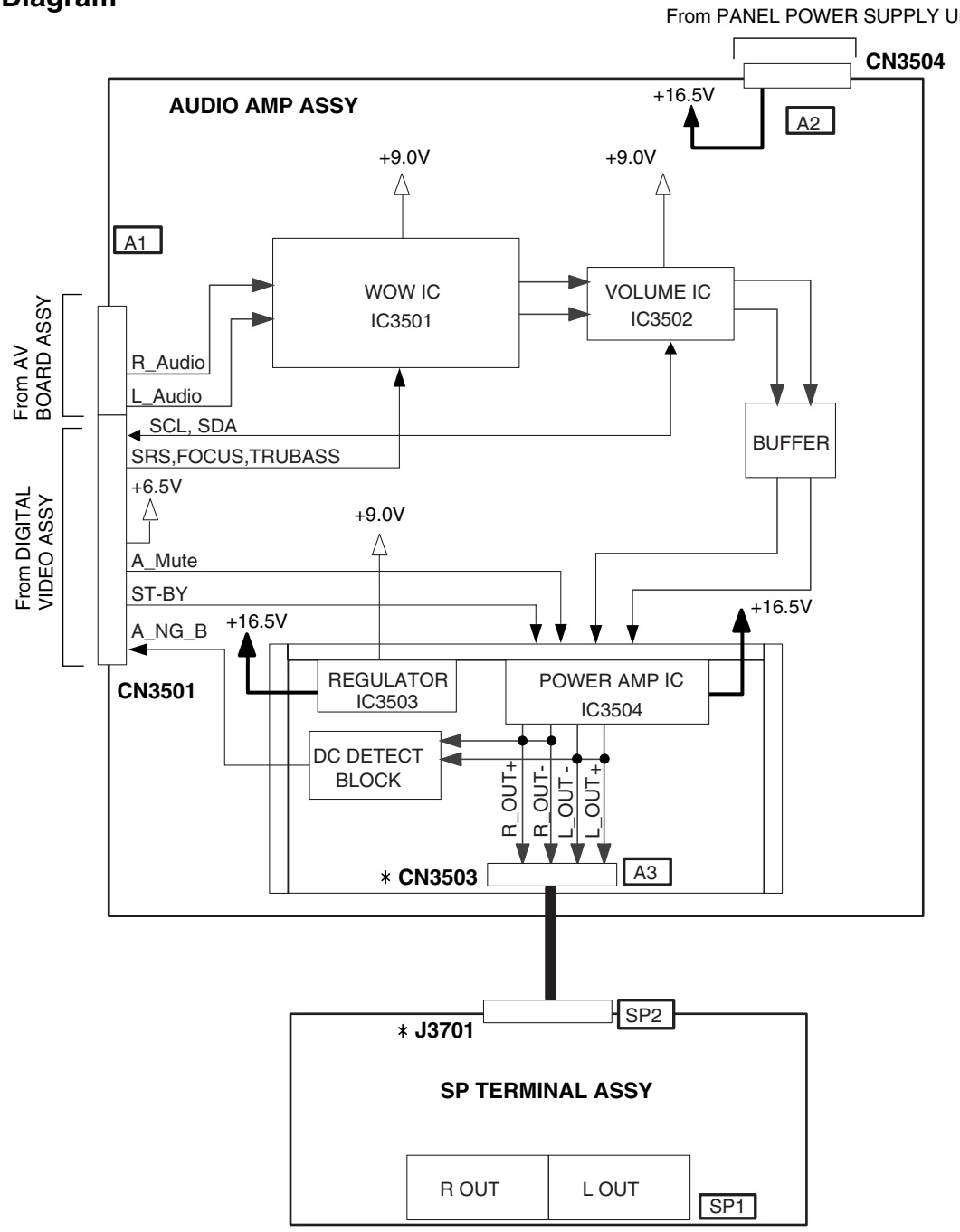
3.1.10 MAIN BOARD ASSY




64M SDRA
IC7001, IC7002
HY57V64322OCT-7
64M FLASH
IC7152
MBM29PL3200BE70PFV
RXD/TXD/CLK_IC2
RESETX2
RA/GA/BA_IC2 [0:7]
RB/GB/BB_IC2 [0:7]
(RGB)
H/V/DE/DCLK_IC2
RXD/TXD/CLK__IC3
UART_RXD/TXD
RESETX2
RA/GA/BA [0:9]
(RGB)
SDA/SCL_HDCP
RST_HDCP
CN7401
AKP1239
I/P
IC7004
PE5362A
RESIZE MIX
IC7101
PD5855A
DVI Tx
IC7401
SII170BCLG64
TMDS
FIELD
VDO, CLKO
HDO_DEO_CLKO
HD/DE_OUT
HD1/VD1_MAIN
HD2/VD2_MAIN
SY/SCLK_2
HD/VD/DE/CK_SUB
CLP/PLLHD/PLLHOLD_SUB
HD1/VD1_SUB
HD2/VD2_SUB
RA/GA/BA_SUB [0:7]
(YCbCr/RGB)
SY/SCLK_3
LOGIC
IC7403
TC74VHC574FT
HDO_DEO
LOGIC
IC7404
TC74VCX08FT
BUFFER
IC7003
TC74LCX125FT
FIELD2
MRXD, MTXD
X7001
ASS1174
(85MHz)
MAIN BOARD ASSY
SCL/SDA_MA, SCL/SDA_HDCP
SCL/SDA_AV, SCL/SDA_EP2
SCL/SDA_HDMI/TXT
RXD/TXD/CLK_IC2
RXD/TXD/CLK_IC3
RXD/TXD/CLK_IF
SCL/SDA_EP
EEPROM
IC7205
BR24L64F-W
EEPRST
MRXD, MTXD
UART SEL
IC7202
TC74VHC125FT
UART_RXD/TXD
MAIN UCOM
IC7207
MB91F355APMTGE1
RST_DT/HDCP/IF/TXT
RST_ASIC
LOGIC
IC7451
TC74VHC08FT
RESETX1, RESETX2
RXD/TXD_DT
UART SEL.
IC7204
TC74VHC125FT
RESET
RET2
RXD/TXD/CLK_WR
HDMI_AUDIO_CE
/TXD/CLK
RESET IC
IC7203
PST3628UR
RESET IC
IC7206
PST3628UR
RESET IC
IC7210
PST3612UR

3.1.11 AUDIO AMP ASSY

Block Diagram

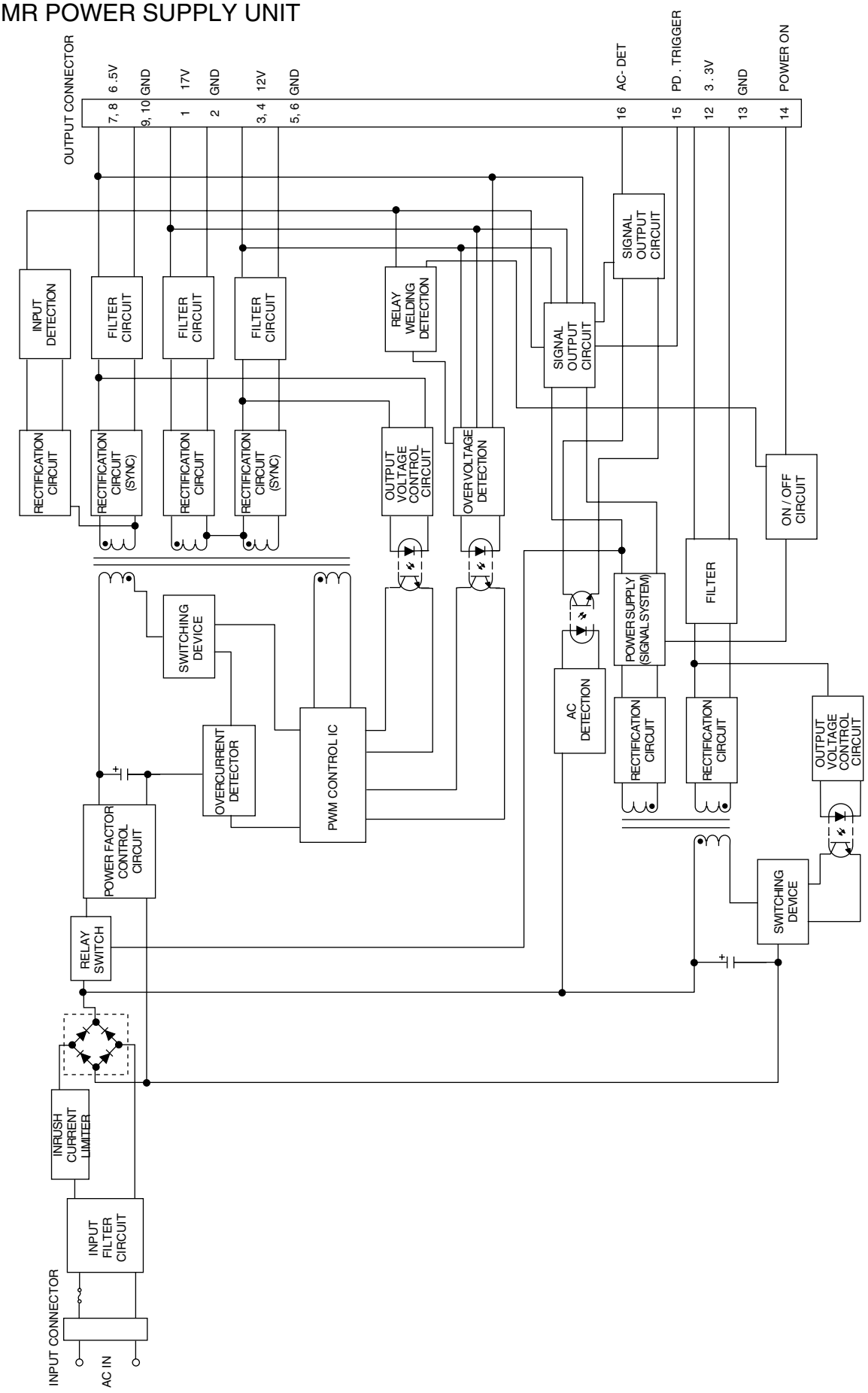


∗
The wiring numbers of
A3 and SP2 in parts list are below.

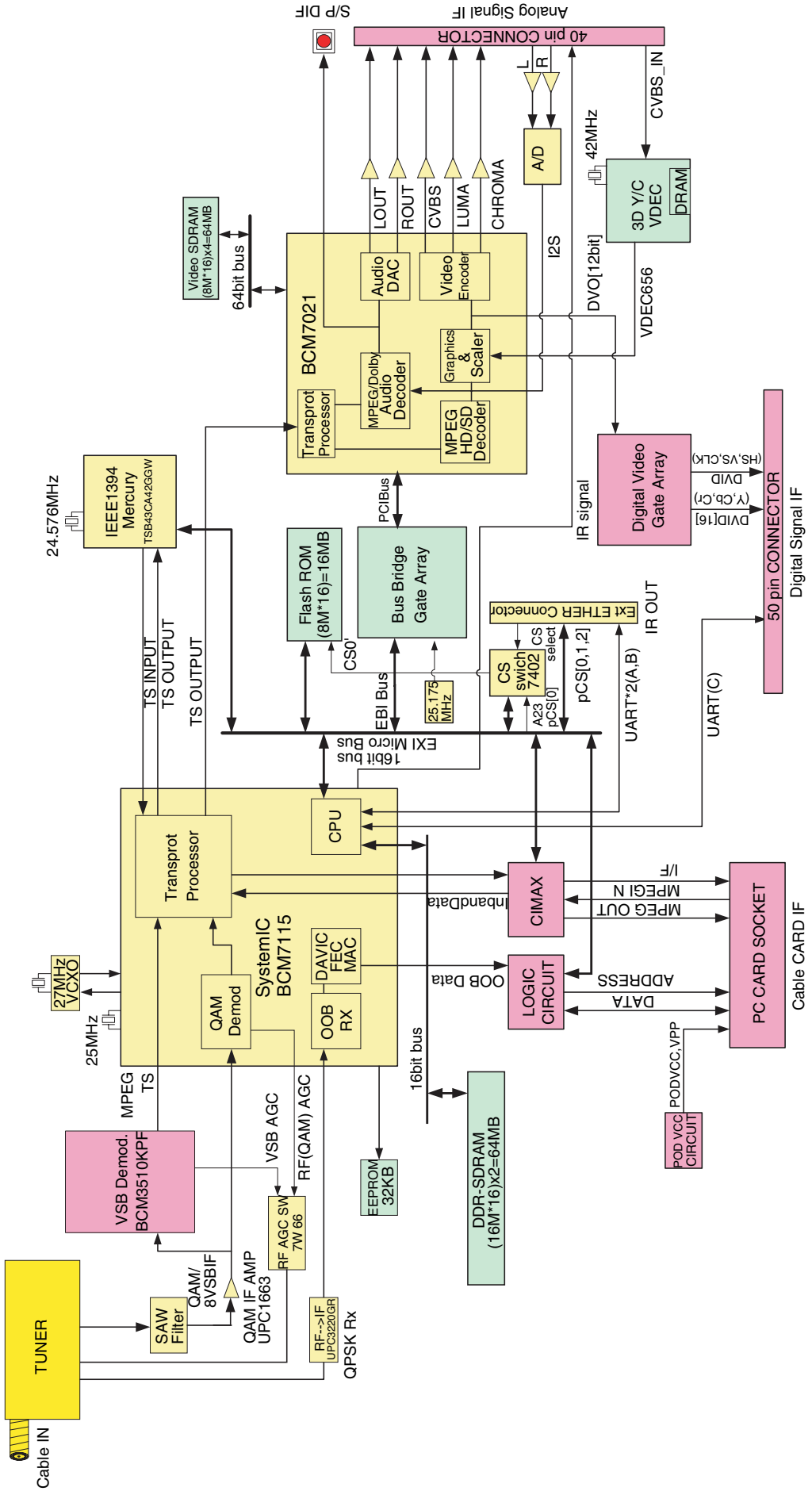
	PCB	parts list
A3	CN3503	CN3502
SP2	J3701	CN3702

3.1.12 MR POWER SUPPLY UNIT

MR POWER SUPPLY UNIT



3.1.13 TUNER BOARD ASSY

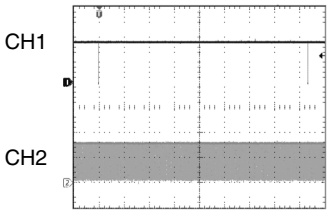


3.2 WAVEFORMS

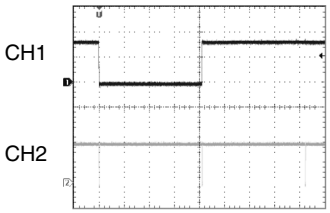
DIGITAL VIDEO ASSY (1/6)

DIGITAL IF BLOCK

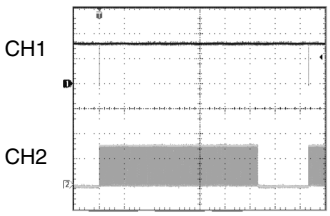
① **CH1: R4241 (VD)**
CH2: R4241 (HD)
V: 2V/div. H: 2msec/div.



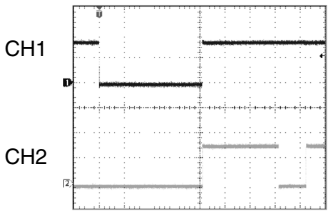
① **CH1: R4241 (VD)**
CH2: R4241 (HD)
V: 2V/div. H: 4µsec/div.



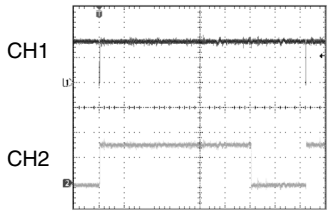
② **CH1: R4241 (VD)**
CH2: R4241 (DE)
V: 2V/div. H: 2msec/div.



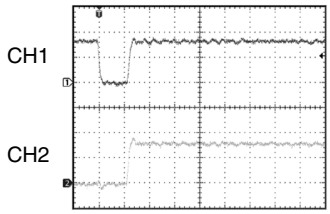
② **CH1: R4241 (VD)**
CH2: R4241 (DE)
V: 2V/div. H: 4µsec/div.



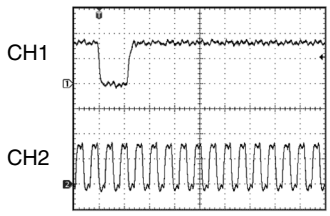
③ **CH1: R4241 (HD)**
CH2: R4241 (DE)
V: 2V/div. H: 2µsec/div.



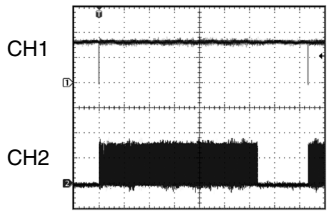
③ **CH1: R4241 (HD)**
CH2: R4241 (DE)
V: 2V/div. H: 40nsec/div.



④ **CH1: R4241 (HD)**
CH2: R4233 (DCLK)
V: 2V/div. H: 40nsec/div.



⑤ **CH1: R4241 (VD)**
CH2: R4247 (RAI2)
V: 2V/div. H: 2msec/div.

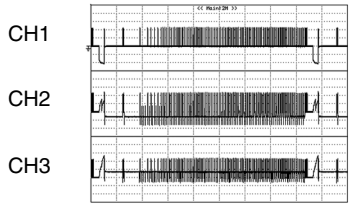


43 X DRIVE ASSY, 43 Y DRIVE ASSY and 43 SCAN A ASSY

43 X SUS BLOCK, 43 Y LOGIC BLOCK, 43 Y SUS BLOCK

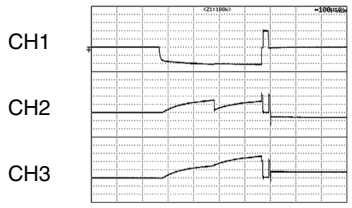
① Drive Output Waveform (1 field,color-bar)

CH1: R1226 (XPSUS) - K1201 (SUSGND) (43 X DRIVE ASSY)
CH2: R2348 (YPSUS) - K2301 (SUSGND) (43 Y DRIVE ASSY)
CH3: K3001 (Scan OUT) - K2301 (SUSGND) (43 SCAN A ASSY)
V: 100V/div. H: 2msec/div.



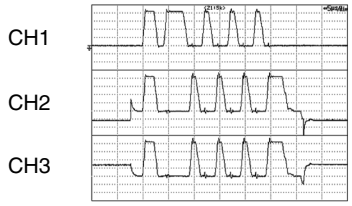
① Reset Pulse

CH1: R1226 (XPSUS) - K1201 (SUSGND) (43 X DRIVE ASSY)
CH2: R2348 (YPSUS) - K2301 (SUSGND) (43 Y DRIVE ASSY)
CH3: K3001 (Scan OUT) - K2301 (SUSGND) (43 SCAN A ASSY)
V: 100V/div. H: 100µsec/div.



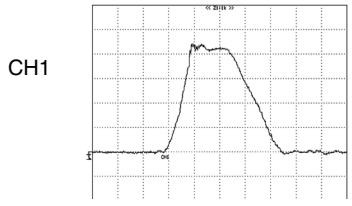
① Sustain Pulse (1 sub-sub-field)

CH1: R1226 (XPSUS) - K1201 (SUSGND) (43 X DRIVE ASSY)
CH2: R2348 (YPSUS) - K2301 (SUSGND) (43 Y DRIVE ASSY)
CH3: K3001 (Scan OUT) - K2301 (SUSGND) (43 SCAN A ASSY)
V: 50V/div. H: 5µsec/div.



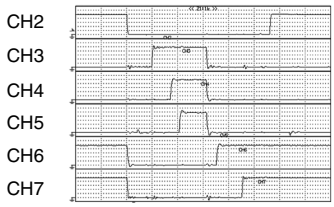
② Sustain Waveform

CH1: R2348 (YPSUS) - K2301 (SUSGND) (43 Y DRIVE ASSY)
V: 50V/div. H: 500nsec/div.



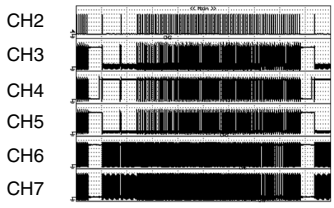
③ Control Signal (Sustain Waveform Gen.)

CH2: K2016 (YSUS-G) - K2010 (DGND)
CH3: K2025 (YSUS-U1) - K2010 (DGND)
CH4: K2022 (YSUS-U2) - K2010 (DGND)
CH5: K2026 (YSUS-B) - K2010 (DGND)
CH6: K2024 (YSUS-D2) - K2010 (DGND)
CH7: K2027 (YSUS-D1) - K2010 (DGND) (43 Y DRIVE ASSY)
V: 1V/div. H: 500nsec/div.



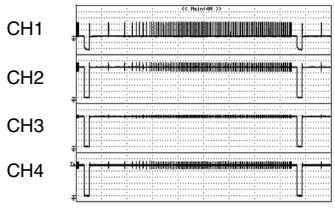
④ Scan Control Signal (1 field, color-bar)

CH2: K2006 (SI) - K2029 (DGND)
CH3: K2009 (OC1) - K2029 (DGND)
CH4: K2004 (OC2) - K2029 (DGND)
CH5: K2007 (CLR) - K2029 (DGND)
CH6: K2003 (CLK2) - K2029 (DGND)
CH7: K2008 (LE) - K2029 (DGND) (43 Y DRIVE ASSY)
V: 1V/div. H: 2msec/div.



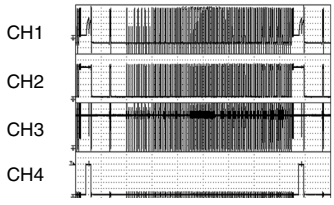
⑤ X Drive Pulse Control Signal (color-bar)

CH1: R1226 (XPSUS) - K2301 (SUSGND)
V: 100V/div. H: 2msec/div.
CH2: K1016 (XCP-MSK) - K1020 (DGND)
CH3: K1015 (XSUS-MSK) - K1020 (DGND)
CH4: K1014 (XNR-D) - K1020 (DGND)
V: 1V/div. H: 2msec/div.
(43 X DRIVE ASSY)



⑥ Y Drive Pulse Control Signal (color-bar)

CH1: R2348 (YPSUS) - K2301 (SUSGND)
V: 50V/div. H: 2msec/div.
CH2: K2015 (YSUS-MSK) - K2010 (DGND)
CH3: K2017 (YSOFT-D) - K2010 (DGND)
CH4: K2023 (YPR-U) - K2010 (DGND)
V: 1V/div. H: 2msec/div.
(43 Y DRIVE ASSY)

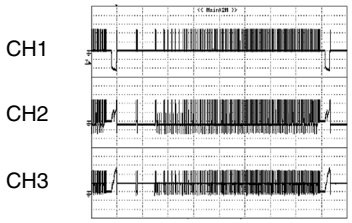


50 X DRIVE ASSY, 50 Y DRIVE ASSY and 50 SCAN A ASSY

• 50 X SUS BLOCK, 50 Y LOGIC BLOCK, 50 Y SUS BLOCK

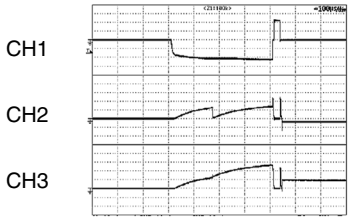
① Drive Output Waveform (1 field,color-bar)

CH1: R1226 (XPSUS) - K1201 (SUSGND) (50 X DRIVE ASSY)
CH2: R2348 (YPSUS) - K2301 (SUSGND) (50 Y DRIVE ASSY)
CH3: K3001 (Scan OUT) - K2301 (SUSGND) (50 SCAN A ASSY)
V: 100V/div. H: 2msec/div.



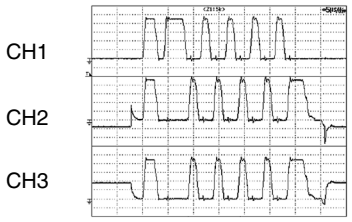
① Reset Pulse

CH1: R1226 (XPSUS) - K1201 (SUSGND) (50 X DRIVE ASSY)
CH2: R2348 (YPSUS) - K2301 (SUSGND) (50 Y DRIVE ASSY)
CH3: K3001 (Scan OUT) - K2301 (SUSGND) (50 SCAN A ASSY)
V: 100V/div. H: 100µsec/div.



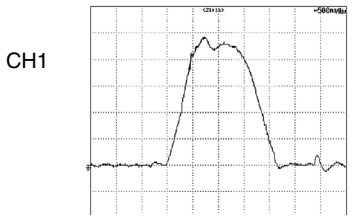
① Sustain Pulse (1 sub-sub-field)

CH1: R1226 (XPSUS) - K1201 (SUSGND) (50 X DRIVE ASSY)
CH2: R2348 (YPSUS) - K2301 (SUSGND) (50 Y DRIVE ASSY)
CH3: K3001 (Scan OUT) - K2301 (SUSGND) (50 SCAN A ASSY)
V: 50V/div. H: 5µsec/div.



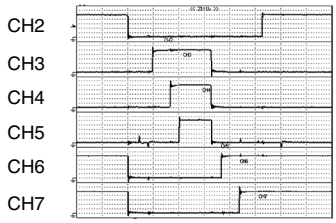
② Sustain Waveform

CH1: R2348 (YPSUS) - K2301 (SUSGND) (50 Y DRIVE ASSY)
V: 50V/div. H: 500nsec/div.



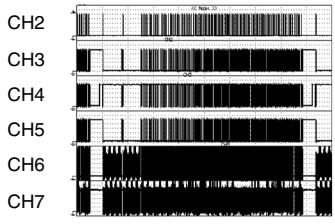
③ Control Signal (Sustain Waveform Gen.)

CH2: K2016 (YSUS-G) - K2010 (DGND)
CH3: K2025 (YSUS-U1) - K2010 (DGND)
CH4: K2022 (YSUS-U2) - K2010 (DGND)
CH5: K2026 (YSUS-B) - K2010 (DGND)
CH6: K2024 (YSUS-D2) - K2010 (DGND)
CH7: K2027 (YSUS-D1) - K2010 (DGND) (50 Y DRIVE ASSY)
V: 1V/div. H: 500nsec/div.



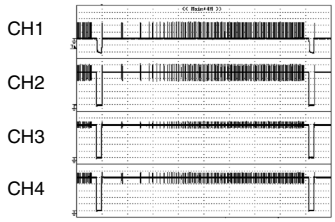
④ Scan Control Signal (1 field, color-bar)

CH2: K2006 (SI) - K2029 (DGND)
CH3: K2009 (OC1) - K2029 (DGND)
CH4: K2004 (OC2) - K2029 (DGND)
CH5: K2007 (CLR) - K2029 (DGND)
CH6: K2003 (CLK2) - K2029 (DGND)
CH7: K2008 (LE) - K2029 (DGND) (50 Y DRIVE ASSY)
V: 1V/div. H: 2msec/div.



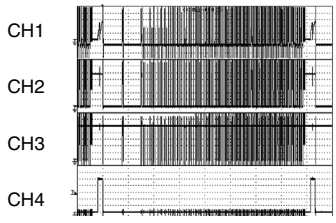
⑤ X Drive Pulse Control Signal (color-bar)

CH1: R1226 (XPSUS) - K2301 (SUSGND)
V: 100V/div. H: 2msec/div.
CH2: K1016 (XCP-MSK) - K1020 (DGND)
CH3: K1015 (XSUS-MSK) - K1020 (DGND)
CH4: K1014 (XNR-D) - K1020 (DGND)
V: 1V/div. H: 2msec/div.
(50 X DRIVE ASSY)



⑥ Y Drive Pulse Control Signal (color-bar)

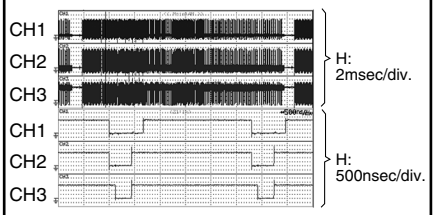
CH1: R2348 (YPSUS) - K2301 (SUSGND)
V: 50V/div. H: 2msec/div.
CH2: K2015 (YSUS-MSK) - K2010 (DGND)
CH3: K2017 (YSOFT-D) - K2010 (DGND)
CH4: K2023 (YPR-U) - K2010 (DGND)
V: 1V/div. H: 2msec/div.
(50 Y DRIVE ASSY)



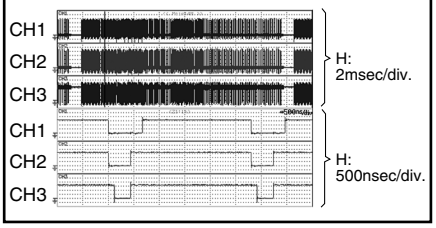
43 ADDRESS ASSY (1/3)

ADR RESONANCE BLOCK (VIDEO)

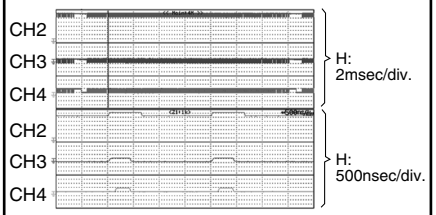
① CH1: IC1601-pin 2 (ADR_B2)
CH2: IC1603-pin 4 (ADR_U1)
CH3: IC1603-pin 2 (ADR_D1)
V: 1V/div.
(Input: VIDEO, Signal: Color-bar)



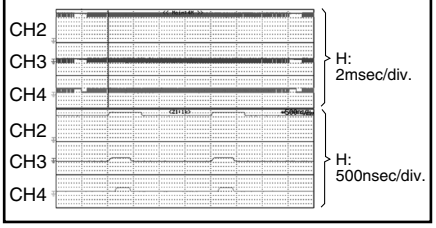
② CH1: IC1601-pin 2 (ADR_B2)
CH2: IC1602-pin 4 (ADR_U2)
CH3: IC1602-pin 2 (ADR_D2)
V: 1V/div.
(Input: VIDEO, Signal: Color-bar)



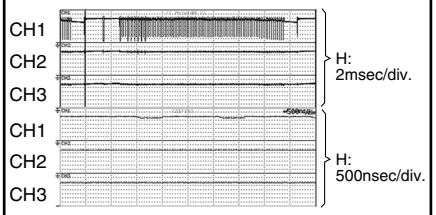
③ CH2: Q1601-pin 4 (ADR_B2)
CH3: Q1603-pin 4 (ADR_U1)
CH4: Q1603-pin 2 (ADR_D1)
V: 10V/div.
(Input: VIDEO, Signal: Color-bar)



④ CH2: Q1601-pin 4 (ADR_B2)
CH3: Q1602-pin 4 (ADR_U2)
CH4: Q1602-pin 2 (ADR_D2)
V: 10V/div.
(Input: VIDEO, Signal: Color-bar)



⑤ CH1: Q1601 Drain (V+ADR)
CH2: Q1603 Source
CH3: Q1602 Source
V: 10V/div.
(Input: VIDEO, Signal: Color-bar)

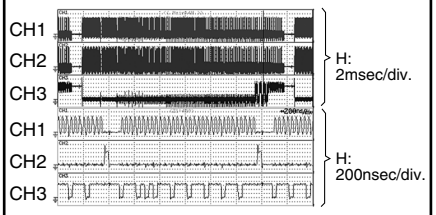


⑥ CH1: Q1601 Drain (V+ADR)
CH2: Q1603 Source
CH3: Q1602 Source
V: 10V/div.
(Input: VIDEO, Signal: B/W(1×8))

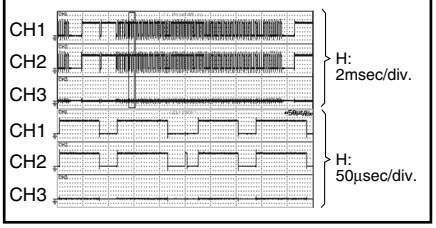
43 ADDRESS ASSY (3/3)

ADR LOGIC BLOCK (2/2)

① CH1: IC1552-pin 18 (CLK input)
CH2: IC1552-pin 16 (LE input)
CH3: IC1552-pin 9 (DATA input)
V: 1V/div.
(Input: VIDEO, Signal: Color-bar)



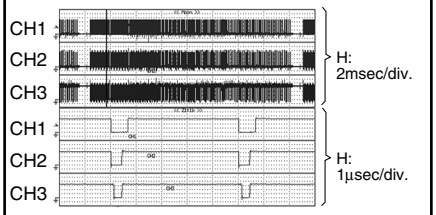
② CH1: IC1552-pin 23 (HBLK input)
CH2: IC1552-pin 19 (LBLK input)
CH3: IC1552-pin 25 (HZ input)
V: 1V/div.
(Input: VIDEO, Signal: Color-bar)



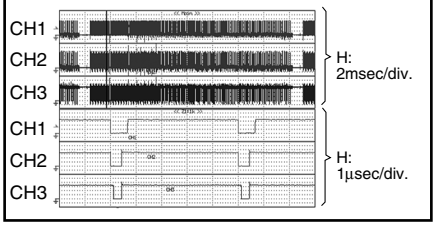
50 ADDRESS ASSY

• ADR RESONANCE BLOCK (VIDEO)

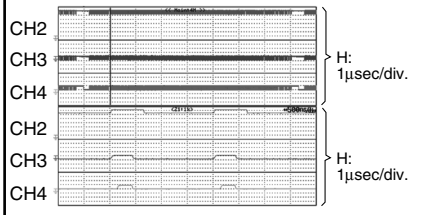
① CH1: IC1601-pin 2 (ADR_B2)
CH2: IC1603-pin 4 (ADR_U1)
CH3: IC1603-pin 2 (ADR_D1)
V: 1V/div.
(Input: VIDEO, Signal: Color-bar)



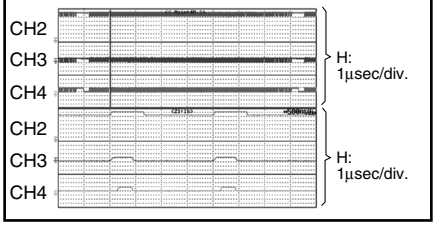
② CH1: IC1601-pin 2 (ADR_B2)
CH2: IC1602-pin 4 (ADR_U2)
CH3: IC1602-pin 2 (ADR_D2)
V: 1V/div.
(Input: VIDEO, Signal: Color-bar)



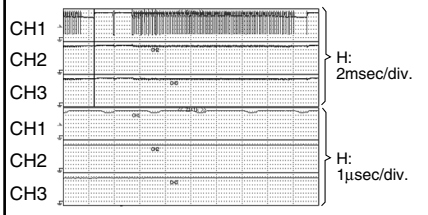
③ CH2: Q1601-pin 4 (ADR_B2)
CH3: Q1603-pin 4 (ADR_U1)
CH4: Q1603-pin 2 (ADR_D1)
V: 10V/div.
(Input: VIDEO, Signal: Color-bar)



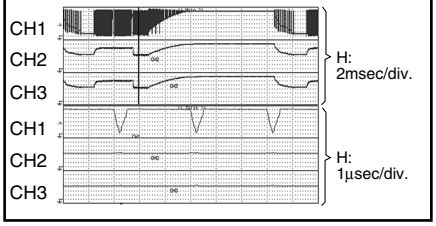
④ CH2: Q1601-pin 4 (ADR_B2)
CH3: Q1602-pin 4 (ADR_U2)
CH4: Q1602-pin 2 (ADR_D2)
V: 10V/div.
(Input: VIDEO, Signal: Color-bar)



⑤ CH1: Q1601 Drain (V+ADR)
CH2: Q1603 Source
CH3: Q1602 Source
V: 10V/div.
(Input: VIDEO, Signal: Color-bar)



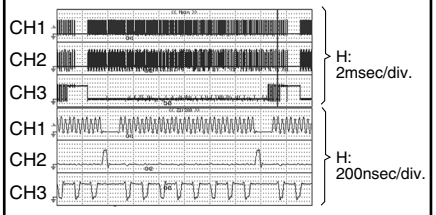
⑥ CH1: Q1601 Drain (V+ADR)
CH2: Q1603 Source
CH3: Q1602 Source
V: 10V/div.
(Input: VIDEO, Signal: B/W(1×8))



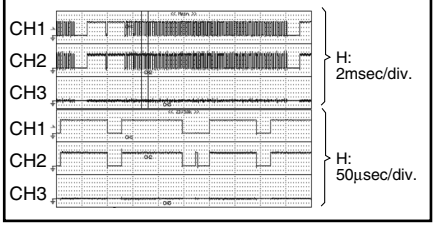
50 ADDRESS ASSY

• ADR LOGIC BLOCK

① CH1: IC1553-pin 18 (CLK input)
CH2: IC1553-pin 16 (LE input)
CH3: IC1553-pin 9 (DATA input)
V: 1V/div.
(Input: VIDEO, Signal: Color-bar)



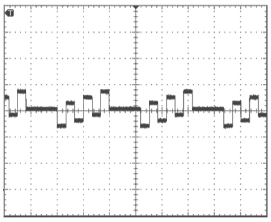
② CH1: IC1553-pin 23 (HBLK input)
CH2: IC1553-pin 19 (LBLK input)
CH3: IC1553-pin 25 (HZ input)
V: 1V/div.
(Input: VIDEO, Signal: Color-bar)



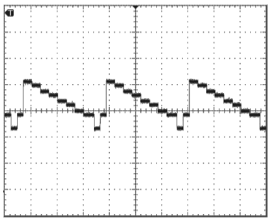
Note : The encircled numbers denote measuring point in the schematic diagram.

MAIN BOARD ASSY

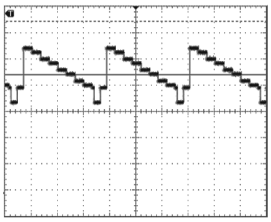
1 TP6402 (Component B)
V: 500mV/div. H: 20µsec/div.



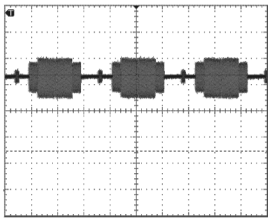
7 TP6605 (Component G)
V: 500mV/div. H: 20µsec/div.



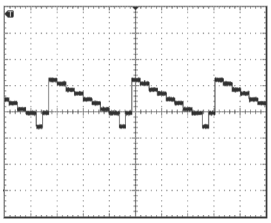
13 TP7456 (SUB_Y)
V: 1V/div. H: 20µsec/div.



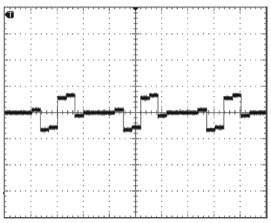
14 TP7457 (SUB_C)
V: 1V/div. H: 20µsec/div.



2 TP6403 (Component G)
V: 500mV/div. H: 20µsec/div.

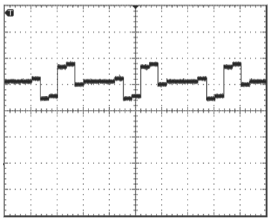


8 TP6606 (Component R)
V: 500mV/div. H: 20µsec/div.

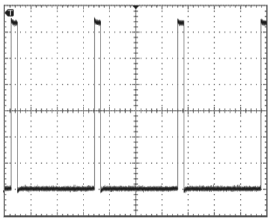


AV BOARD ASSY

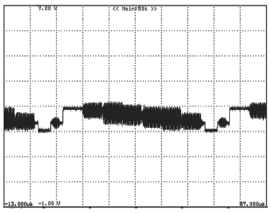
3 TP6404 (Component R)
V: 500mV/div. H: 20µsec/div.



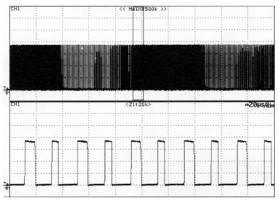
9 TP6607 (HD2_SUB)
V: 500mV/div. H: 20µsec/div.



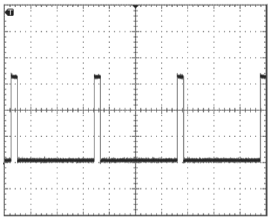
1 TP7514 (AIR_V)
V: 1V/div. H: 10µsec/div.



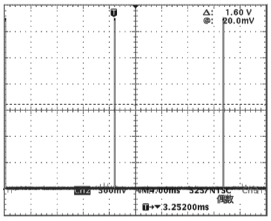
5 IC8503-pin 1 (SW COLLECTOR) (36V VDD) V: 10V/div.
H: 500µsec/div.(1ch), 20µsec/div.(2ch)



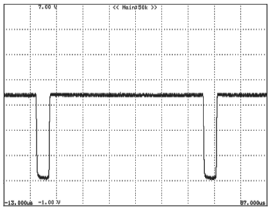
4 TP6405 (HD2_MAIN)
V: 1V/div. H: 20µsec/div.



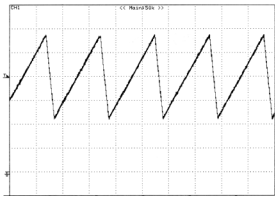
10 TP6608 (VD2_SUB)
V: 500mV/div. H: 4msec/div.



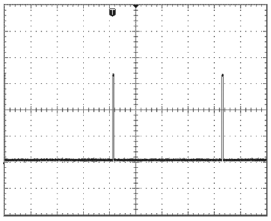
2 R7541 - R7542 (AIR_HS)
V: 1V/div. H: 10µsec/div.



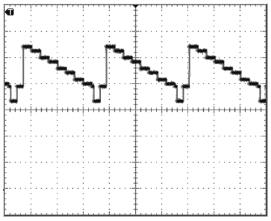
6 IC8503-pin 3 (TIMING CAPACITOR) (36V VDD Oscillation)
V: 0.2V/div. H: 10µsec/div.



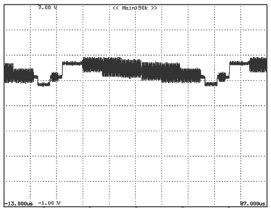
5 TP6406 (VD2_MAIN)
V: 1V/div. H: 400msec/div.



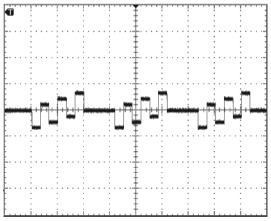
11 TP7451 (MAIN_Y)
V: 1V/div. H: 20µsec/div.



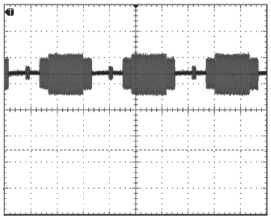
3 IC8002-pin 63 (AIR_V)
V: 1V/div. H: 10µsec/div.



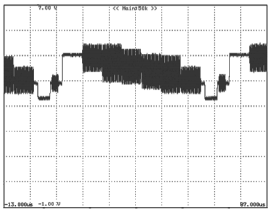
6 TP6604 (Component B)
V: 500mV/div. H: 20µsec/div.



12 TP7452 (MAIN_C)
V: 1V/div. H: 20µsec/div.



4 IC8002-pin 44 (MAIN_Y)
V: 1V/div. H: 10µsec/div.



3.3 VOLTAGES

AV BOARD ASSY — MAIN BOARD ASSY

CN8652 (AKM1201)		Voltage (V)	CN7455 (AKM1201)	
No.	Name		Name	No.
1	GND	0	GND	50
2	GND	0	GND	49
3	N.C.	–	N.C.	48
4	GND	0	GND	47
5	A_MUTE	0	A_MUTE	46
6	GND	0	GND	45
7	HDMI_RCH	0	HDMI_RCH	44
8	GND	0	GND	43
9	HDMI_LCH	0	HDMI_LCH	42
10	GND	0	GND	41
11	GND	0	GND	40
12	GND	0	GND	39
13	GND	0	GND	38
14	GND	0	GND	37
15	GND	0	GND	36
16	GND	0	GND	35
17	GND	0	GND	34
18	GND	0	GND	33
19	GND	0	GND	32
20	GND	0	GND	31
21	GND	0	GND	30
22	GND	0	GND	29
23	GND	0	GND	28
24	GND	0	GND	27
25	GND	0	GND	26
26	AIR_AFT2	1.7	AIR_AFT2	25
27	AIR_HS2	0	AIR_HS2	24
28	AIR_AFT	1.8	AIR_AFT	23
29	AIR_HS	0.5	AIR_HS	22
30	RST_IF	3.3	RST_IF	21
31	TXD_WR	3.3	TXD_WR	20
32	RXD_WR	3.3	RXD_WR	19
33	SDA_AV	5	SDA_AV	18
34	SCL_AV	5	SCL_AV	17
35	RXD_IF	3.3	RXD_IF	16
36	TXD_IF	3.3	TXD_IF	15
37	CLK_IF	3.3	CLK_IF	14
38	REQ_IF	0	REQ_IF	13
39	BUSY_IF	0	BUSY_IF	12
40	CE_IF	3.3	CE_IF	11
41	RESET_TXT	3.3	RESET_TXT	10
42	RELAY	2.4	RELAY	9
43	N.C.	–	N.C.	8
44	PSW1	0	PSW1	7
45	PD_MAIN	0	PD_MAIN	6
46	N.C.	–	N.C.	5
47	AM_MUTE	0	AM_MUTE	4
48	N.C.	–	N.C.	3
49	N.C.	–	N.C.	2
50	GND	0	GND	1

AV BOARD ASSY — MAIN BOARD ASSY

CN8504 (KM200NA15)		Voltage (V)	CN7451 (AKM1301)	
No.	Name		Name	No.
1	GND_D	0.0	GND_D	1
2	V+3V_DD	3.3	V+3V_DD	2
3	V+3V_DD	3.3	V+3V_DD	3
4	GND_D	0.0	GND_D	4
5	V+1V_DD	1.5	V+1V_DD	5
6	V+1V_DD	1.5	V+1V_DD	6
7	GND_D	0.0	GND_D	7
8	V+6V	6.7	V+6V	8
9	GND	0.0	GND	9
10	V+12V_16V	16.9	V+12V_16V	10
11	GND	0.0	GND	11
12	V+3V_UCOM	3.3	V+3V_UCOM	12
13	GND	0.0	GND	13
14	V+3V_STB	3.3	V+3V_STB	14
15	GND	0.0	GND	15

AV BOARD ASSY — MAIN BOARD ASSY

CN8651 (AKM1201) No.	CN8651 (AKM1201) Name	Voltage (V)	CN7454 (AKM1201) Name	CN7454 (AKM1201) No.
1	GND	0	GND	50
2	AC_DET	2.7	AC_DET	49
3	STB_MT	0	STB_MT	48
4	AC_OFF	0	AC_OFF	47
5	SDA_EP2	3.3	SDA_EP2	46
6	SCL_EP2	3.3	SCL_EP2	45
7	VCC_EP	3.3	VCC_EP	44
8	FAN_CTL2	3.3	FAN_CTL2	43
9	FAN_NG3	0	FAN_NG3	42
10	WE_TXT	0	WE_TXT	41
11	N.C.	–	N.C.	40
12	MON_MUTE	0	MON_MUTE	39
13	DSUB_DET	0	DSUB_DET	38
14	PN2	0	PN2	37
15	VD_TXT	0	VD_TXT	36
16	HD_TXT	0	HD_TXT	35
17	GND	0	GND	34
18	GND	0	GND	33
19	GND	0	GND	32
20	GND	0	GND	31
21	BLK	0	BLK	30
22	GND	0	GND	29
23	GND	0	GND	28
24	GND	0	GND	27
25	SUBC_Y	4.5	SUBC_Y	26
26	GND	0	GND	25
27	SUBC_PR	4.5	SUBC_PR	24
28	GND	0	GND	23
29	SUBC_PB	4.5	SUBC_PB	22
30	GND	0	GND	21
31	SUB_C	4.3	SUB_C	20
32	GND	0	GND	19
33	SUB_Y	3.7	SUB_Y	18
34	GND	0	GND	17
35	G_CCTXT	1.3	G_CCTXT	16
36	GND	0	GND	15
37	R_CCTXT	1.3	R_CCTXT	14
38	GND	0	GND	13
39	B_CCTXT	1.3	B_CCTXT	12
40	GND	0	GND	11
41	MAINC_Y	4.5	MAINC_Y	10
42	GND	0	GND	9
43	MAINC_PR	4.5	MAINC_PR	8
44	GND	0	GND	7
45	MAINC_PB	4.5	MAINC_PB	6
46	GND	0	GND	5
47	MAIN_C	4.4	MAIN_C	4
48	GND	0	GND	3
49	MAIN_Y	4.4	MAIN_Y	2
50	GND	0	GND	1

TUNER BOARD ASSY — MAIN BOARD ASSY

CN7501 (AKM1236) No.	CN7501 (AKM1236) Name	Voltage (V)	CN6951 (AKM1201) Name	CN6951 (AKM1201) No.
1	GND	0	GND_D	50
2	N.C.	–	GND_D	49
3	N.C.	–	N.C.	48
4	RESET	3.37	RST_DT	47
5	DTB_DETECT	0	DT_DET	46
6	AC_DETECT	–	POW_DET	45
7	GND	0	GND_D	44
8	N.C.	–	N.C.	43
9	N.C.	–	N.C.	42
10	GND	0	GND_D	41
11	TXDC	3.3	RXD_DT	40
12	RXDC	3.3	TXD_DT	39
13	GND	0	GND_D	38
14	N.C.	–	N.C.	37
15	GND	0	GND_D	36
16	GND	0	GND_D	35
17	GND	0	GND_D	34
18	GND	0	GND_D	33
19	GND	0	GND_D	32
20	GND	0	GND_D	31
21	GND	0	GND_D	30
22	GND	0	GND_D	29
23	Y0	0/3.3	Y0	28
24	Y1	0/3.3	Y1	27
25	Y2	0/3.3	Y2	26
26	Y3	0/3.3	Y3	25
27	Y4	0/3.3	Y4	24
28	Y5	0/3.3	Y5	23
29	Y6	0/3.3	Y6	22
30	Y7	0/3.3	Y7	21
31	GND	0	GND_D	20
32	UV0	0/3.3	UV0	19
33	UV1	0/3.3	UV1	18
34	UV2	0/3.3	UV2	17
35	UV3	0/3.3	UV3	16
36	UV4	0/3.3	UV4	15
37	UV5	0/3.3	UV5	14
38	UV6	0/3.3	UV6	13
39	UV7	0/3.3	UV7	12
40	GND	0	GND_D	11
41	HS	3.1	HS	10
42	GND	0	GND_D	9
43	VS	3.2	VS	8
44	GND	0	GND_D	7
45	DE	2.6	DE	6
46	GND	0	GND_D	5
47	CLK	1.6	CLK	4
48	GND	0	GND_D	3
49	OE_B	0	OE_B	2
50	GND	0	GND_D	1

AV BOARD ASSY — MR POWER SUPPLY UNIT

CN8501 (KM200NA16)		Voltage (V)	CP51 (KM200NA16)	
No.	Name		Name	No.
1	V+16.5V	17.6	V+16.5V	1
2	GND	0	GND	2
3	V+12V	12	V+12V	3
4	V+12V	12	V+12V	4
5	GND	0	GND	5
6	GND	0	GND	6
7	V+6.5V	6.8	V+6.5V	7
8	V+6.5V	6.8	V+6.5V	8
9	GND	0	GND	9
10	GND	0	GND	10
11	V+12V_STB	14.9	V+12V_STB	11
12	V+3V_STB	3.3	V+3V_STB	12
13	GND	0	GND	13
14	RELAY	2.4	RELAY	14
15	PD_TRIGGER	0	PD_TRIGGER	15
16	AC_DET	2.7	AC_DET	16

MAIN BOARD ASSY — TRAP SW

CN7203 (AKM1213)		Voltage (V)		
No.	Name		Name	No.
1	TRAP_SW	0.7		
2	N.C.	–		
3	V+3V_UCOM	3.3		

AV BOARD ASSY — TUNER BOARD ASSY

CN8502 (KM200NA12)		Voltage (V)	CN1002 (AKM1298)	
No.	Name		Name	No.
1	NC	–	NC	1
2	GND_D	0	GND_D	2
3	V+3.3VA	3.3	V+3.3VA	3
4	GND_D	0.0	GND_D	4
5	V+5VA	5	V+5VA	5
6	GND_D	0	GND_D	6
7	V+6.5VA	6.8	V+6.5VA	7
8	GND_D	0.0	GND_D	8
9	V+12V	12	V+12V	9
10	GND_D	0.0	GND_D	10
11	V+30V	31	V+30V	11
12	GND_D	0.0	GND_D	12

AV BOARD ASSY — TUNER BOARD ASSY

CN8503 (KM200NA14)		Voltage (V)	CN1003 (AKM1300)	
No.	Name		Name	No.
1	GND_D	0	GND_D	1
2	V+6.5VD	6.8	V+6.5VD	2
3	GND_D	0	GND_D	3
4	V+5VD	5	V+5VD	4
5	GND_D	0	GND_D	5
6	V+1.8VD	1.8	V+1.8VD	6
7	GND_D	0	GND_D	7
8	V+3.3V2	3.3	V+3.3V2	8
9	GND_D	0	GND_D	9
10	V+3.3VD	3.3	V+3.3VD	10
11	V+3.3VD	3.3	V+3.3VD	11
12	GND_D	0	GND_D	12
13	V+2.5VD	2.5	V+2.5VD	13
14	GND_D	0	GND_D	14

DIGITAL VIDEO ASSY

CN5601 (D1)

No.	Signal Name	I/O	Signal Description	Voltages at NTSC Signal Input
1	+12V	I	+12V power input	+12VDC
2	+12V	I	+12V power input	+12VDC
3	GND_VCC	–	GND	
4	GND_VCC	–	GND	
5	EXT_PD	O	Power down signal	0VDC
6	VSUS_ADJ	O	VSUS adjustment signal	
7	PS_PD	I	Power-down detecting signal of POWER SUPPLY block	0VDC
8	RELAY	O	Relay control signal	+3.3VDC
9	DRF	O	Drive control signal	0VDC
10	AC_DET	I	Primary side power (AC) state output at panel side	+3.0VDC
11	PD_TRIG_B	I	Power down trigger	+3.3VDC

CN5602 (D2)

No.	Signal Name	I/O	Signal Description	Voltages at NTSC Signal Input
1	VADR	I	Address drive power (+61V) input	+61VDC
2	VADR	I	Address drive power (+61V) input	+61VDC
3	N.C	–	Not connected	
4	GND_ADR	–	GND	
5	GND_ADR	–	GND	
6	+6.5V	I	+6.5V power input	+6.8VDC
7	GND_VCC	–	GND	

DIGITAL VIDEO ASSY MAIN BOARD ASSY

CN4201 (AKM1239)		Voltage (V)	CN7401 (AKM1239)		Signal Description	Voltages at NTSC Signal Input
No.	Signal Name		Signal Name	No.		
1	GND_D	0.0	GND_D	1	GND	
2	GND_D	0.0	GND_D	2	GND	
3	RXC-	2.3	TXC-	3	DVI signal	DVI differential signal (-)
4	RXC+	2.3	TXC+	4	DVI signal	DVI differential signal (+)
5	GND_D	0.0	GND_D	5	GND	
6	RX0-	2.3	TXC0-	6	DVI signal	DVI differential signal (-)
7	RX0+	2.3	TXC0+	7	DVI signal	DVI differential signal (+)
8	GND_D	0.0	GND_D	8	GND	
9	RX1-	2.3	TXC1-	9	DVI signal	DVI differential signal (-)
10	RX1+	2.3	TXC1+	10	DVI signal	DVI differential signal (+)
11	GND_D	0.0	GND_D	11	GND	
12	RX2-	2.3	TXC2-	12	DVI signal	DVI differential signal (-)
13	RX2+	2.3	TXC2+	13	DVI signal	DVI differential signal (+)
14	GND_D	0.0	GND_D	14	GND	
15	B_SDA	0.0/3.3	B_SDA	15	E2PROM control signal for backup	0-3.3V amplitude square wave
16	B_SCL	0.0/3.3	B_SCL	16	E2PROM control signal for backup	0-3.3V amplitude square wave
17	V+3VACTV	3.3	V+3VACTV	17	Power supply +3.3V output of module UCOM	+3.3VDC
18	MTXD	0.0/3.3	MRXD	18	UART communication receive data to the main UCOM (external PC)	0-3.3V amplitude square wave
19	MRXD	0.0/3.3	MTXD	19	UART communication transmission data from the main UCOM (external PC)	0-3.3V amplitude square wave
20	REQ	0.0/3.3	REQ	20	Communication request to the main UCOM (external PC)	0-3.3V amplitude square wave
21	MR_ST_B	0.0	MR_ST_B	21	Connection state detecting signal with MR	0VDC
22	AC_OFF	0.0	AC_OFF	22	Primary power supply (AC) state output at panel side	0VDC
23	HPD	5.0	HPD	23	Hot plug detection	+5VDC
24	DDC_+5V	5.0	DDC_+5V	24	I2C power supply for DDC	+5VDC
25	FIELD	0.0	FIELD	25	FIELD control signal	0VDC
26	GND_D	0.0	GND_D	26		
27	DDC_SCL	0.0/5.0	DDC_SCL	27	I2C signal for DDC	0-5V amplitude square wave
28	DDC_SDA	0.0/5.0	DDC_SDA	28	I2C signal for DDC	0-5V amplitude square wave
29	GND_D	0.0	GND_D	29		
30	GND_D	0.0	GND_D	30		
31	GND_D	0.0	GND_D	31		

DIGITAL VIDEO ASSY AUDIO AMP ASSY

CN4203 (AKM1280)		Voltage (V)	CN3501 (KM200NA13)		Signal Description	Voltages at NTSC Signal Input
No.	Signal Name		Signal Name	No.		
1	A_NG_B	3.3	A_NG_B	1	Abnormal detecting signal of the audio block	+3.3V DC
2	+6.5V	6.6	+6.5V	2	+6.5V power supply	+6.8V DC
3	ST_BY	3.3	ST_BY	7	Standby signal of the audio block	+3.3V DC
4	A_MUTE	0.0	A_MUTE	8	Audio mute signal input	0V DC
5	SCL	0.0/3.3	SCL	9	I2C control signal for audio	0-3.3V amplitude square wave
6	SDA	0.0/3.3	SDA	10	I2C control signal for audio	0-3.3V amplitude square wave
7	FOCUS	3.3	FOCUS	11	Focus function control signal	+3.3V DC
8	SRS	3.3	SRS	12	SRS function control signal	+3.3V DC
9	TRUBASS	3.3	TRUBASS	13	TRUBASS function control signal	+3.3V DC

AV BOARD ASSY AUDIO AMP ASSY

CN7402 (AKM1290)		Voltage (V)	CN73501 (KM200NA13)		Signal Description	Voltages at NTSC Signal Input
No.	Signal Name		Signal Name	No.		
1	GND	0.0	GNDA	3	GND	
2	AUDIO_L	0.0	L_IN	4	Audio signal Lch	
3	GND	0.0	GNDA	5	GND	
4	AUDIO_R	0.0	R_IN	6	Audio signal Rch	

DIGITAL VIDEO ASSY PANEL POWER SUPPLY UNIT

CN4204 (AKM1280)		Voltage (V)	P1 (B9B-PH-K-S)		Signal Description	Voltages at NTSC Signal Input
No.	Signal Name		Signal Name	No.		
1	N.C.	-	-		Not connected	
2	+6.5V	6.6	+6.5V		+6.5V power supply	+6.8VDC
3	+6.5V	6.6	+6.5V		+6.5V power supply	+6.8VDC
4	GND_VCC	0.0	GND_VCC		GND	
5	GND_VCC	0.0	GND_VCC		GND	
6	STB3.3V	3.3	STB3.3V		Power supply +3.3V input of module UCOM at panel side	+3.3VDC
7	GND_STB	0.0	GND_STB		GND	
8	STB_MUTE_B	3.3	STB_MUTE_B		Standby control (+3.3V mute)	+3.3 VDC
9	AC_DET	3.2	AC_DET		Primary power supply (AC) state input at panel side	+3.0VDC

AUDIO AMP ASSY SP TERMINAL ASSY

CN3502 (KM200NA6)		Voltage (V)	CN3702 (KM200NA6)	
No.	Signal Name		Signal Name	No.
1	GND_VCC	0.0	GND_VCC	1
2	R+	7.1	R+	2
3	R-	6.9	R-	3
4	GND_VCC	0.0	GND_VCC	4
5	L-	7.1	L-	5
6	L+	7.0	L+	6

AUDIO AMP ASSY PANEL POWER SUPPLY UNIT

CN3504 (B3P-VH)		Voltage (V)	P6 (B3P-VH)	
No.	Signal Name		Signal Name	No.
1	+16.5V	16.4	+16.5V	1
2	N.C.	-	N.C.	2
3	GND_VCC	0.0	GND_VCC	3

MAIN BOARD ASSY SR ASSY

CN7202 (AKM1275)		Voltage (V)	CN9504 (AKM1275)	
No.	Signal Name		Signal Name	No.
1	FAN_12V	6.9	FAN_12V	1
2	FAN_NG2	0.0	FAN_NG2	2
3	FAN_NG1	0.0	FAN_NG1	3
4	GND	0.0	GND	4

AV BOARD ASSY SR ASSY

CN8653 (KM200NA10)		Voltage (V)	CN9502 (AKM1296)	
No.	Signal Name		Signal Name	No.
1	RXD_SR4	0.0/3.3	RXD_SR4	1
2	TXD_SR4	0.0/3.3	TXD_SR4	2
3	GND	0.0	GND	3
4	SR_OUT	4.9	SR_OUT	4
5	GND	0.0	GND	5
6	V+12V	12.0	V+12V	6
7	GND	0.0	GND	7
8	HDMI_EXT_RCH	0.0	HDMI_EXT_RCH	8
9	GND	0.0	GND	9
10	HDMI_EXT_LCH	0.0	HDMI_EXT_LCH	10

SR ASSY — FAN MOTOR

CN9505 (AKM1274)		Voltage (V)	FAN MOTOR	
No.	Signal Name		Signal Name	No.
1	FAN_12V	7.0		
2	FAN_NG1	0.0		
3	GND	0.0		

SR ASSY — FAN MOTOR

CN9506 (AKM1274)		Voltage (V)	FAN MOTOR	
No.	Signal Name		Signal Name	No.
1	FAN_12V	7.0		
2	FAN_NG2	0.0		
3	GND	0.0		

AV BOARD ASSY — FAN MOTOR

CN8505 (KM200NA3)		Voltage (V)	FAN MOTOR	
No.	Signal Name		Signal Name	No.
1	FAN_12V	6.9		
2	FAN_NG3	0.0		
3	GND	0.0		

PANEL IR ASSY — AV BOARD ASSY

CN4901 (KM200NA3L)		Voltage (V)	CN8656 (AKM1297)	
No.	Signal Name		Signal Name	No.
3	REM_B	0.0	REM_B	1
2	GND	0.0	GND	2
1	V+3V_STB	3.3	V+3V_STB	3
KEY CONTROL ASSY CN4852 (KM200NA4)				
4	GND	0.0	GND	4
3	N.C.	-	N.C.	5
2	KEY	3.3	KEY	6
1	V+3V_STB	3.3	V+3V_STB	7
LED ASSY CN9461 (KM200NA4)				
4	GND	0.0	GND	8
3	LED_FCT	-	LED_FCT	9
2	LED_R	-	LED_R	10
1	LED_G	3.3	LED_G	11

AV BOARD ASSY — TUNER BOARD ASSY

CN8657 (AKM1303)		Voltage (V)	CN1001 (AKM1217)	
No.	Signal Name		Signal Name	No.
1	GND	0.0	GND	1
2	N.C.	-	N.C.	2
3	GND	0.0	GND	3
4	GND	0.0	GND	4
5	GND	0.0	GND	5
6	GND	0.0	GND	6
7	DT_VIN	0.0	DT_VIN	7
8	GND	0.0	GND	8
9	GND	0.0	GND	9
10	GND	0.0	GND	10
11	DT_Y	0.9	DT_Y	11
12	GND	0.0	GND	12
13	GND	0.0	GND	13
14	GND	0.0	GND	14
15	DT_C	1.3	DT_C	15
16	GND	0.0	GND	16
17	GND	0.0	GND	17
18	GND	0.0	GND	18
19	DT_VIDEO	0.9	DT_VIDEO	19
20	GND	0.0	GND	20
21	GND	0.0	GND	21
22	GND	0.0	GND	22
23	DT_L	4.9	DT_L	23
24	GND	0.0	GND	24
25	GND	0.0	GND	25
26	GND	0.0	GND	26
27	DT_R	4.9	DT_R	27
28	GND	0.0	GND	28
29	GND	0.0	GND	29
30	GND	0.0	GND	30
31	OPT_R	3.2	OPT_R	31
32	GND	0.0	GND	32
33	GND	0.0	GND	33
34	GND	0.0	GND	34
35	OPT_L	3.2	OPT_L	35
36	GND	0.0	GND	36
37	GND	0.0	GND	37
38	GND	0.0	GND	38
39	GND	0.0	GND	39
40	GND	0.0	GND	40

KEY CONTROL ASSY — PANEL KEY ASSY

CN4851 (AKM1272)		Voltage (V)	CN5701 (AKM1208)		Signal Description	Voltages at NTSC Signal Input
No.	Signal Name		Signal Name	No.		
6	STBGND	0.0	STBGND	1		0V DC
5	G1	0.0	G1	2	Key scan signal	0V DC
4	G0	0.0	G0	3	Key scan signal	0V DC
3	D5	3.3	D5	4	Key scan signal	+3.3V DC
2	D6	3.3	D6	5	Key scan signal	+3.3V DC
1	D7	3.3	D7	6	Key scan signal	+3.3V DC

5. PCB PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω → 56 x 10^1 → 561 ····· RD1/4PU 5 6 1 J
47k Ω → 47 x 10^3 → 473 ····· RD1/4PU 4 7 3 J
0.5 Ω → R50 ····· RN2H R 5 0 K
1 Ω → 1R0 ····· RS1P 1 R 0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω → 562 x 10^1 → 5621 ····· RN1/4PC 5 6 2 1 F

LIST OF ASSEMBLIES for PDP-4350SX

Mark	No.	Description	Part No.
NSP	1	43 ADDRESS ASSY	AWV2076
NSP	2	43 ADDRESS ASSY	AWZ6862
NSP	1	43 SCAN ASSY	AWV2079
NSP	2	43 SCAN A ASSY	AWZ6873
NSP	2	43 SCAN B ASSY	AWZ6874
NSP	2	X CONNECTOR A ASSY	AWZ6875
NSP	2	X CONNECTOR B ASSY	AWZ6876
NSP	1	43 X DRIVE ASSY	AWV2178
	2	KEY CONTROL ASSY	AWZ6844
	2	PANEL IR ASSY	AWZ6845
	2	43 X DRIVE ASSY	AWZ6991
	2	PANEL SENSOR ASSY	AWZ6872
	1	43 Y DRIVE ASSY	AWV2179
	1	TUNER BOARD ASSY	AWE1303
	1	DIGITAL VIDEO ASSY	AWV2181
	1	MAIN BOARD ASSY	AWV2183
NSP	1	AUDIO ASSY	AWV2201
	2	AUDIO AMP ASSY	AWW1005
	2	SP TERMINAL ASSY	AWW1006
NSP	1	AV BOARD ASSY	AWV2182
	2	AV BOARD ASSY	AWW1007
	2	SR ASSY	AWW1008
	2	LED ASSY	AWW1009
	2	AC SEPA ASSY	AWW1010
	2	KEY ASSY	AWW1011
⚠	1	MR POWER SUPPLY UNIT	AXY1091
⚠	1	PANEL POWER SUPPLY UNIT	AXY1107

MR POWER SUPPLY UNIT

This assembly has no service part.

PANEL POWER SUPPLY UNIT

This assembly has no service part.

LIST OF ASSEMBLIES for PDP-5050SX

Mark	No.	Description	Part No.
NSP	1	50 ADDRESS ASSY	AWV2080
NSP	2	50 ADDRESS ASSY	AWZ6870
NSP	1	50 SCAN ASSY	AWV2083
NSP	2	50 SCAN A ASSY	AWZ6878
NSP	2	50 SCAN B ASSY	AWZ6879
NSP	2	X CONNECTOR A ASSY	AWZ6880
NSP	2	X CONNECTOR B ASSY	AWZ6881
NSP	1	50 X DRIVE ASSY	AWV2081
	2	KEY CONTROL ASSY	AWZ6844
	2	PANEL IR ASSY	AWZ6845
	2	50 X DRIVE ASSY	AWZ6877
	2	PANEL SENSOR ASSY	AWZ6872
	1	50 Y DRIVE ASSY	AWV2082
NSP	1	TUNER BOARD ASSY	AWE1303
	1	DIGITAL VIDEO ASSY	AWV2181
NSP	1	MAIN BOARD ASSY	AWV2183
NSP	1	AUDIO ASSY	AWV2201
	2	AUDIO AMP ASSY	AWW1005
	2	SP TERMINAL ASSY	AWW1006
NSP	1	AV BOARD ASSY	AWV2182
	2	AV BOARD ASSY	AWW1007
	2	SR ASSY	AWW1008
	2	LED ASSY	AWW1009
	2	AC SEPA ASSY	AWW1010
	2	KEY ASSY	AWW1011
⚠	1	MR POWER SUPPLY UNIT	AXY1091
⚠	1	PANEL POWER SUPPLY UNIT	AXY1107

MR POWER SUPPLY UNIT

This assembly has no service part.

PANEL POWER SUPPLY UNIT

This assembly has no service part.

• PCB Parts for PDP-4350SX

Mark No.	Description	Part No.

43 ADDRESS ASSY

[43 ADR LOGIC BLOCK]

SEMICONDUCTORS

	IC1501	PEE001B

COILS AND FILTERS

	L1504	QTL1013

CAPACITORS

	C1501, C1502	ACH1357
	C1509, C1510	CKSSYB102K50
	C1503-C1507, C1555, C1558, C1561	CKSSYF104Z16
	C1564	CKSSYF104Z16

RESISTORS

	R1510, R1519, R1522	RAB4C470J
	R1505-R1509, R1530, R1531	RS1/16SS1000F
	R1511-R1518, R1520, R1521, R1523	RS1/16SS470J
	R1524, R1536-R1539	RS1/16SS470J
	Other Resistors	RS1/16S###J

OTHERS

	CN1501 40P FFC CONNECTOR	AKM1215

[43 ADR RESONANCE BLOCK]

SEMICONDUCTORS

	IC1601-IC1603	TND307TD
	Q1604	2SA1163
	Q1601	HAT1110R
	Q1602, Q1603	HAT3021R
	D1601	1SS302
	D1605-D1608	RF051UA1D
	D1602-D1604	UDZS15(B)

COILS AND FILTERS

	L1601, L1602	ATH1163

CAPACITORS

	C1605 (0.1/100V)	ACG1098
	C1607, C1615 (0.1/100V)	ACG1121
	C1613	ACH1357
	C1603 (47/16V)	ACH1391
	C1601, C1602 (56/80V)	ACH1405
	C1609, C1614	CKSRYB104K25
	C1604, C1608, C1612	CKSSYF104Z16

RESISTORS

	R1620	ACN1174
	R1602,R1608-R1611	RS1/16SS220J
	Other Resistors	RS1/16S###J

43 SCAN A ASSY

SEMICONDUCTORS

	IC3001-IC3006	SN755866PZP

CAPACITORS

	C3001, C3002, C3012, C3013 (0.1/250V)	ACG1088
	C3023, C3024, C3034, C3035 (0.1/250V)	ACG1088
	C3045, C3046, C3056, C3057 (0.1/250V)	ACG1088
	C3005, C3008, C3016, C3019, C3026	CCSRCH101J50
	C3029, C3037, C3040, C3048, C3051	CCSRCH101J50
	C3060, C3063	CCSRCH101J50
	C3007, C3018, C3033, C3044, C3050	CCSRCH181J50
	C3062	CCSRCH181J50
	C3006, C3011, C3017, C3022	CCSRCH331J50
	C3031, C3032, C3042, C3043, C3049	CCSRCH331J50
	C3055, C3061, C3066	CCSRCH331J50
	C3009, C3010, C3020, C3021, C3028	CCSRCH390J50
	C3030, C3039, C3041, C3053, C3054	CCSRCH390J50
	C3064, C3065	CCSRCH390J50
	C3003, C3014, C3025, C3036, C3047	CKSRYB105K6R3
	C3058	CKSRYB105K6R3

RESISTORS

	R3003, R3011, R3017, R3025, R3030	RAB4C221J
	R3036	RAB4C221J
	Other Resistors	RS1/16S###J

OTHERS

	CN3001 13P CONNECTOR NONPB	AKP1261
	K3001, K3004, K3009, K3015, K3017 TEST PIN	AKX9002
	K3019, K3021 TEST PIN	AKX9002

43 SCAN B ASSY

SEMICONDUCTORS

	IC3201-IC3206	SN755866PZP

CAPACITORS

	C3201, C3211, C3212, C3222, C3223 (0.1/250V)	ACG1088
	C3233, C3234, C3244, C3245 (0.1/250V)	ACG1088
	C3255, C3256, C3266 (0.1/250V)	ACG1088
	C3203, C3204, C3214, C3215, C3226	CCSRCH101J50
	C3228, C3237, C3239, C3247, C3251	CCSRCH101J50
	C3258, C3259	CCSRCH101J50
	C3206, C3217, C3232, C3243, C3249	CCSRCH181J50
	C3261	CCSRCH181J50
	C3205, C3210, C3216, C3221	CCSRCH331J50
	C3230, C3231, C3241, C3242, C3248	CCSRCH331J50
	C3254, C3260, C3265	CCSRCH331J50
	C3208, C3209, C3219, C3220, C3227	CCSRCH390J50
	C3229, C3238, C3240, C3252, C3253	CCSRCH390J50
	C3263, C3264	CCSRCH390J50
	C3202, C3213, C3224, C3235, C3246	CKSRYB105K6R3
	C3257	CKSRYB105K6R3

RESISTORS

	R3202, R3210, R3216, R3224, R3229	RAB4C221J
	R3235	RAB4C221J
	Other Resistors	RS1/16S###J

OTHERS

	CN3201 13P CONNECTOR NONPB	AKP1261
	K3203, K3208, K3214, K3216, K3218 TEST PIN	AKX9002
	K3221 TESTPIN	AKX9002

Mark No.	Description	Part No.

X CONNECTOR A ASSY

This assembly has no service part.

X CONNECTOR B ASSY

This assembly has no service part.

43 X DRIVE ASSY

OTHERS

1001	PLATE X	ANG2664
1002	SCREW	PMB30P060FNI

[43 X LOGICBLOCK]
SEMICONDUCTORS

IC1002	TC74ACT540FT
IC1001	TC74ACT541FT
IC1003	TC74VHC08FT

CAPACITORS

C1001	CEHAT470M25
C1002-C1004	CKSSYB104K10

RESISTORS

R1001, R1002, R1005	RAB4C470J
R1003, R1004, R1007	RAB4C472J
Other Resistors	RS1/16S###J

OTHERS

CN1001 30P FFC CONNECTOR	AKM1218

[43 X RESONANCE BLOCK]
SEMICONDUCTORS

IC1103	BA10393F
IC1101, IC1102	TND506MD
Q1113	2SC4116
Q1102, Q1103, Q1111, Q1112	2SK3555-01MR
Q1105	2SK3592-01S
Q1108, Q1109	2SK3864
Q1101, Q1104, Q1107, Q1110	QSZ2
D1109, D1122	1SS302
D1112, D1119, D1135, D1136	1SS355
D1101, D1102, D1104, D1105	D1FL40
D1107, D1108, D1111, D1114-D1117	D1FL40
D1120, D1121, D1127, D1128	D1FL40
D1103, D1113, D1118, D1125	RF2001T3D
D1129, D1130	RF2001T3D
D1110, D1123	UDZS16(B)

COILS AND FILTERS

L1104	ATH1119
L1102	ATH1133
L1103, L1105	ATH1134
L1101	LFEA470J

CAPACITORS

C1112, C1113, C1125, C1126, C1127 (100P/630V)	ACE1168
C1111, C1124, C1134, C1135 (0.22/250V)	ACG1104
C1109, C1119 (0.22/250V)	ACG1112
C1101, C1105, C1116, C1117	CCSRCH331J50
C1102, C1118	CKSRYB105K6R3
C1128, C1130-C1132	CKSSYB104K10
C1104, C1108, C1115, C1122	CKSYB105K25

RESISTORS

R1116, R1122	RS1/10S1003F
R1133, R1143-R1145	RS1/10S100J
R1155, R1156	RS1/10S220J
R1103, R1106, R1118, R1119, R1123	RS1/10S2R2J
R1126, R1153	RS1/10S2R2J
R1136	RS1/16S1002F
R1139	RS1/16S4701F
R1130, R1134	RS1/16S8201F
R1113, R1128	RS1MMF101J
R1147, R1148	RS2MMF5R6J
VR1101-VR1104	CCP1390
Other Resistors	RS1/16S###J

OTHERS

1101 DRIVE HEATSINK	ANH1628
1101 SCREW	PMH30P080FTC

[43 X SUS BLOCK]
SEMICONDUCTORS

IC1203, IC1207	STK795-514
IC1202	HCPL-M611
IC1205	NJM2872F05
IC1206	TND301S
IC1204, IC1209	TND307TD
Q1209	2SA1727
Q1203	2SD1898
Q1205	2SK2865
Q1208	DTC124EUA
Q1201	HN1B04FU
D1212	1SS302
D1211, D1213	1SS355
D1204, D1217	D1FL40
D1201, D1207	EC10QS04
D1208	UDZS5R6(B)

COILS AND FILTERS

L1204, L1205	ATH1112
L1202, L1207	LFEA100J
L1203, L1206	LFEA470J

CAPACITORS

C1214-C1216, C1228-C1230	ACE1163
C1245	ACE1173
C1209 (0.1/630V)	ACG1092
C1219, C1231	ACH1414
C1246	CEHAT221M25
C1201, C1203, C1207, C1220	CEHAT470M25
C1223, C1224, C1238, C1239, C1248	CEHAT470M25
C1212, C1213, C1225, C1240, C1241	CKSRYB104K16
C1243	CKSRYB104K16
C1202, C1205, C1206, C1247	CKSRYF104Z50

RESISTORS

R1260, R1261	ACN1162
R1230	ACN1166
R1208	ACN1174
R1255	ACN1178
R1256	ACN1198
R1226, R1251	RS1MMF361J

Mark	No.	Description	Part No.
	R1235, R1236		RS2MMF121J
	Other Resistors		RS1/16S###J
	OTHERS		
	KN1201-KN1205, KN1208	GROUND PLATE	ANK-142
	KN1210-KN1212	GROUND PLATE	ANK-142
	KN1214	GROUND PLATE	ANK-142
	CN1201	CONNECTOR	B12B-EH
	[43 X D-D CON BLOCK]		
	SEMICONDUCTORS		
	IC1402		MIP2E3DMU
	IC1401, IC1403		PS2701A-1(L)
	IC1404		TA76431FR
	Q1401		2SA1576A
	Q1402		2SC4116
	D1406, D1409, D1410		D1FK70
	D1407, D1408		D1FL20U(S)
	D1405		U1ZB330
	D1401, D1403		UDZS5R6(B)
	COILS AND FILTERS		
	⚠T1401		ATK1153
	L1401		LFEA101J
	CAPACITORS		
	C1401, C1402		ACH1361
	C1404		CEHAT101M16
	C1405		CEHAT101M25
	C1409		CEHAT331M16
	C1403, C1407, C1408, C1411		CKSRYB104K16
	C1406		CKSRYF104Z50
	RESISTORS		
	R1405, R1406, R1408-R1410, R1414		RS1/10S3602F
	R1420		RS1/16S1101F
	R1403		RS1/16S2702F
	R1401, R1404		RS1/16S4701F
	R1417		RS1/16S7500F
	VR1401		CCP1390
	Other Resistors		RS1/16S###J
	OTHERS		
	1001		ANH1613
	1001		ANH1062
	1001	SCREW	PMH30P080FTC

KEY CONTROL ASSY

Mark	No.	Description	Part No.
	SEMICONDUCTORS		
	IC4851		PD5719A
	D4851-D4853, D4855, D4856		DA204U
	COILS AND FILTERS		
	F4851- F4856		QTL1011
	CAPACITORS		
	⚠C4856-C4858		CCSSCH101J50
	C4854		CEAT470M50
	C4853		CKSRYB103K50
	RESISTORS		
	R4858		RAB4C182J
	R4861- R4863		RS1/16S101J
	Other Resistors		RS1/16SS###J
	OTHERS		
	CN4851	6P FFC CONNECTOR	AKM1272
	CN4852	PLUG (4P)	KM200NA4
	⚠X4851	CERALOCK	ASS1162

PANEL IR ASSY

Mark	No.	Description	Part No.
	SEMICONDUCTORS		
	Q4901		2SC4116
	D4902		DA204U
	CAPACITORS		
	C4901		CEVW470M6R3
	C4902		CKSRYB103K50
	C4903		CKSSYB102K50
	C4904		CKSSYF104Z16
	RESISTORS		
	Other Resistors		RS1/16SS###J
	OTHERS		
	CN4901	L-PLUG (3P)	KM200NA3L
	U4901	IR UNIT	RPM7240-H5

PANEL SENSOR ASSY

Mark	No.	Description	Part No.
	SEMICONDUCTORS		
	IC1072		MM1522XU
	IC1071		MM3012XN
	CAPACITORS		
	C1071, C1074, C1075		CKSRYB103K50
	C1072, C1073		CKSRYF105Z10
	RESISTORS		
	R1073, R1074		RS1/16S1001F
	Other Resistors		RS1/16SS###J
	OTHERS		
	CN1071	PLUG (3P)	KM200NA3

43 Y DRIVE ASSY

Mark	No.	Description	Part No.
	OTHERS		
	2002	CARD SPACER	AEC1957
	2001	PLATE Y	ANG2557
	2001	SCREW	PMH30P080FTC
	2002	SCREW	PMB30P060FNI
	2001	DRIVE HEATSINK A	ANH1613
	2001	DRIVE SIRICON SHEET	AEH1062
	[43 Y LOGIC BLOCK]		
	SEMICONDUCTORS		
	IC2002		TC74ACT540FT
	IC2001, IC2003		TC74ACT541FT
	IC2005, IC2006		TC74VHC08FT
	IC2004		TC74VHC541FT

Mark No.	Description	Part No.
CAPACITORS		
C2001		CEHAT470M16
C2007		CKSRYB471K50
C2002-C2006, C2008		CKSSYB104K10
RESISTORS		
R2045		RAB4C0R0J
R2055		RAB4C100J
R2025		RAB4C101J
R2018, R2019		RAB4C102J
R2002, R2004, R2013-R2015		RAB4C470J
R2005, R2006, R2012, R2016, R2017		RAB4C472J
Other Resistors		RS1/16S###J
OTHERS		
CN2001 50P CONNECTOR		AKM1201
[43 Y SCAN BLOCK]		
SEMICONDUCTORS		
IC2101, IC2103-IC2106, IC2108, IC2109		HCPL-M611
IC2111, IC2112		PST3638UR
IC2102, IC2107		TC74ACT540FT
COILS AND FILTERS		
L2101-L2103		LFEA100J
CAPACITORS		
C2104, C2111		ACH1406
C2101, C2107, C2113		CEHAT221M16
C2118, C2119		CKSRYB102K50
C2116, C2117		CKSRYB471K50
C2102, C2103, C2105, C2106		CKSSYB104K10
C2108-C2110, C2112, C2114		CKSSYB104K10
RESISTORS		
R2138, R2141		RAB4C0R0J
R2121, R2128		RAB4C472J
Other Resistors		RS1/16S###J
OTHERS		
CN2101, CN2102 15P CONNECTOR		AKM1200
[43 Y RESONANCE BLOCK]		
SEMICONDUCTORS		
IC2211		BA10393F
IC2201, IC2202		TND506MD
Q2213		2SC4081
Q2205, Q2206, Q2208, Q2209		2SK3555-01MR
Q2212		2SK3592-01S
Q2202, Q2203		2SK3864
Q2201, Q2204, Q2207, Q2210		QSZ2
D2209, D2223		1SS302
D2228, D2229, D2232, D2233		1SS355
D2202-D2205, D2207, D2208		D1FL40
D2212-D2214, D2216-D2219		D1FL40
D2221, D2222		D1FL40
D2201, D2206, D2211, D2220, D2225		RF2001T3D
D2230		RF2001T3D
D2210, D2224		UDZS16(B)

Mark No.	Description	Part No.
COILS AND FILTERS		
L2202		ATH1119
L2204		ATH1133
L2203, L2205		ATH1134
L2201		LFEA470J
CAPACITORS		
C2212- C2214, C2226, C2227		ACE1168
C2211, C2224, C2238, C2240 (100P/630V)		ACG1104
C2210, C2223 (0.22/250V)		ACG1112
C2202, C2205, C2216, C2217		CCSRCH331J50
C2203, C2218		CKSRYB105K6R3
C2230, C2232, C2233, C2235		CKSSYB104K10
C2201, C2208, C2215, C2219		CKSYB105K25
RESISTORS		
R2240, R2241		RS1/10S1003F
R2244-R2247		RS1/10S100J
R2260, R2261		RS1/10S220J
R2205, R2211, R2213, R2220, R2221		RS1/10S2R2J
R2253, R2265		RS1/10S2R2J
R2234		RS1/16S1002F
R2235		RS1/16S4701F
R2233, R2242		RS1/16S8201F
R2215, R2230		RS1MMF101J
R2256, R2259		RS2MMF5R6J
VR2201-VR2204		CCP1390
Other Resistors		RS1/16S###J
OTHERS		
2201 DRIVE HEATSINK		ANH1628
2201 SCREW		PMH30P080FTC
[43 Y SUS BLOCK]		
SEMICONDUCTORS		
IC2303, IC2307		STK795-515
IC2302		HCPL-M611
IC2305		NJM2872F05
IC2310		TC7SH04FU
IC2301, IC2304		TND301S
IC2311		TND307TD
Q2313		2SA1727
Q2310		2SC4081
Q2303		2SD1898
Q2302		2SK3325-Z
Q2312		2SK3694-01S
Q2309		HN1B04FU
D2322		1SS302
D2312, D2325, D2301, D2302		1SS355
D2324		D1FL40
D2319		EC10QS04
D2320		RF051UA1D
D2323		UDZS16(B)
D2306		UDZS5R6(B)
COILS AND FILTERS		
L2306, L2307		ATH1112
L2304, L2309		LFEA100J
L2308		LFEA101J
L2301, L2302, L2305		LFEA470J

Mark	No.	Description	Part No.
		CAPACITORS	
		C2309-C2311, C2327, C2329, C2330	ACE1163
		C2314	ACE1165
A		C2346 (0.33/100V)	ACG1118
		C2336	ACH1407
		C2316, C2331	ACH1414
		C2303, C2342	ACH1416
		C2343	CCSRCH102J50
		C2306	CEHAT221M25
		C2308, C2324, C2339, C2340, C2349	CEHAT470M16
		C2304, C2320, C2338, C2348	CEHAT470M25
		C2305, C2322, C2323, C2325, C2341	CKSRYB104K16
		C2347	CKSRYB105K6R3
		C2301, C2307, C2344	CKSRYF104Z50
B			
		RESISTORS	
		R2364, R2365	ACN1162
		R2332	ACN1166
		R2367, R2379- R2386	RS1/10S0R0J
		R2368	RS1/10S151J
		R2309	RS1MMF132J
		R2310, R2311	RS1MMF472J
		R2312, R2313, R2322, R2325	RS3LMF100J
		R2348, R2352, R2358, R2359	RS3LMF1R8J
		Other Resistors	RS1/16S###J
C			
		OTHERS	
		KN2301-KN2305, KN2310, KN2312	ANK-142
		KN2314, KN2316 GROUND PLATE	ANK-142
		CN2301 CONNECTOR	B11B-EH
		[43 Y D-D CON BLOCK]	
		SEMICONDUCTORS	
		IC2406	BA10358F
		IC2401	MIP2E3DMC
		IC2402-IC2405, IC2407, IC2409	PS2701A-1(L)
		IC2410-IC2412	TA76431FR
D		Q2402, Q2407	2SA1037K
		Q2410	2SA1163
		Q2417	2SA2005
		Q2405	2SC2713
		Q2411-Q2413, Q2416, Q2419	2SC4081
		Q2403	2SD1664
		Q2401, Q2404	2SD1898
		Q2415	HN1C01FU
		D2430	1SS301
		D2410, D2419, D2436	1SS302
		D2409, D2418	1SS355
E			
		D2402	D1FK70
		D2404-D2407	D1FL20U(S)
		D2414	D1FL40
		D2403	EC8FS6
		D2401	U1ZB330
		D2412, D2413, D2422	UDZS15(B)
		D2437, D2438	UDZS33(B)
		D2432	UDZS4R3(B)
		D2423, D2431	UDZS5R6(B)
F			

Mark	No.	Description	Part No.
		COILS AND FILTERS	
		⚠T2402	ATK1156
		⚠T2403	ATK1157
		⚠T2401	ATK1158
		L2402	LFEA100J
		L2401	LFEA101J
		L2403	LFEA470J
		CAPACITORS	
		C2406	ACH1360
		C2401	ACH1361
		C2427	CEHAT100M50
		C2403	CEHAT101M16
		C2405, C2407, C2417	CEHAT101M25
		C2414	CEHAT221M16
		C2410	CEHAT221M25
		C2411	CEHAT331M25
		C2420	CEHAT470M2A
		C2409, C2419	CKSRYB103K50
		C2402, C2412, C2413, C2423, C2425	CKSRYB104K16
		C2434-C2436, C2441-C2444	CKSRYB104K16
		C2415, C2421, C2428	CKSRYB105K6R3
		C2404, C2408, C2416, C2418, C2426	CKSRYF104Z50
		C2429	CKSRYF104Z50
		RESISTORS	
		R2429	ACN1225
		R2435, R2439	RS1/10S2202F
		R2402-R2404	RS1/10S3902F
		R2442	RS1/16S1201F
		R2468	RS1/16S1202F
		R2424, R2427	RS1/16S2001F
		R2420, R2438	RS1/16S2201F
		R2451	RS1/16S2202F
		R2467	RS1/16S3301F
		R2452, R2453	RS1/16S3302F
		R2457-R2460	RS1/16S4701F
		R2506	RS3LMF151J
		VR2401, VR2402	CCP1390
		Other Resistors	RS1/16S###J
		OTHERS	
		2401 HEATSINK	ANH1614
		2401 SCREW	BBZ30P080FTC

• PCB Parts for PDP-5050SX

Mark	No.	Description	Part No.

50 ADDRESS ASSY

[50 ADR LOGIC BLOCK]

SEMICONDUCTORS

	IC1501	PEE001B

COILS AND FILTERS

	L1504	QTL1013

CAPACITORS

	C1501, C1502 (47/6.3V)	ACH1357
	C1509, C1510	CKSSYB102K50
	C1503-C1507, C1511, C1512, C1552	CKSSYF104Z16
	C1555, C1558, C1561, C1564	CKSSYF104Z16

RESISTORS

	R1510, R1519, R1522, R1526	RAB4C470J
	R1505-R1509, R1530, R1531	RS1/16SS1000F
	R1511-R1518, R1520, R1521, R1523	RS1/16SS470J
	R1524, R1527, R1528, R1532-R1535	RS1/16SS470J
	Other Resistors	RS1/16S###J

OTHERS

	CN1501 40P FFC CONNECTOR	AKM1215

[50 ADR RESONANCE BLOCK]

SEMICONDUCTORS

	IC1601-IC1603	TND307TD
	Q1604	2SA1163
	Q1601	HAT1110R
	Q1602, Q1603	HAT3021R
	D1601	1SS302
	D1605, D1606, D1616, D1617	D1FL20U(S)
	D1610, D1619	RF051UA1D
	D1602, D1607, D1615	UDZS15(B)

COILS AND FILTERS

	L1601, L1602	ATH1164

CAPACITORS

	C1605 (0.01/100V)	ACG1101
	C1619, C1620 (330P/100V)	ACG1105
	C1609, C1615 (0.1/100V)	ACG1119
	C1618 (47/6.3V)	ACH1357
	C1603 (47/16V)	ACH1391
	C1601, C1602 (56/80V)	ACH1405
	C1608, C1614	CKSRYB104K25
	C1604, C1606, C1612	CKSSYF104Z16

RESISTORS

	R1631	ACN1174
	Other Resistors	RS1/16S###J

50 SCAN A ASSY

SEMICONDUCTORS

	IC3001-IC3006	AN16021AA-K
	D3003-D3006	1SS355

CAPACITORS

	C3001, C3002, C3012, C3013 (0.1/250V)	ACG1088
	C3023, C3024, C3034, C3035 (0.1/250V)	ACG1088
	C3045, C3046, C3056, C3057 (0.1/250V)	ACG1088
	C3005, C3008, C3016, C3019, C3026	CCSRCH101J50
	C3029, C3037, C3040, C3048, C3051	CCSRCH101J50
	C3060, C3063	CCSRCH101J50
	C3007, C3018, C3033, C3044, C3050	CCSRCH181J50
	C3062	CCSRCH181J50
	C3006, C3011, C3017, C3022	CCSRCH331J50
	C3031, C3032, C3042, C3043, C3049	CCSRCH331J50
	C3055, C3061, C3066	CCSRCH331J50
	C3009, C3010, C3020, C3021, C3028	CCSRCH390J50
	C3030, C3039, C3041, C3053, C3054	CCSRCH390J50
	C3064, C3065	CCSRCH390J50
	C3003, C3014, C3025, C3036, C3047	CKSRYB105K6R3
	C3058	CKSRYB105K6R3

RESISTORS

	R3003, R3011, R3017, R3025, R3030	RAB4C221J
	R3036	RAB4C221J
	Other Resistors	RS1/16S###J

OTHERS

	CN3001 13P CONNECTOR NON PB	AKP1261
	K3001, K3004, K3009, K3015, K3017	AKX9002
	K3019, K3021 TEST PIN	AKX9002

50 SCAN B ASSY

SEMICONDUCTORS

	IC3201-IC3206	AN16021AA-K
	D3203-D3206	1SS355

CAPACITORS

	C3201, C3211, C3212, C3222, C3223	ACG1088
	C3233, C3234, C3244, C3245(0.1/250V)	ACG1088
	C3255, C3256, C3266 (0.1/250V)	ACG1088
	C3203, C3204, C3214, C3215, C3226	CCSRCH101J50
	C3228, C3237, C3239, C3247, C3251	CCSRCH101J50
	C3258, C3259	CCSRCH101J50
	C3206, C3217, C3232, C3243, C3249	CCSRCH181J50
	C3261	CCSRCH181J50
	C3205, C3210, C3216, C3221	CCSRCH331J50
	C3230, C3231, C3241, C3242, C3248	CCSRCH331J50
	C3254, C3260, C3265	CCSRCH331J50
	C3208, C3209, C3219, C3220, C3227	CCSRCH390J50
	C3229, C3238, C3240, C3252, C3253	CCSRCH390J50
	C3263, C3264	CCSRCH390J50
	C3202, C3213, C3224, C3235, C3246	CKSRYB105K6R3
	C3257	CKSRYB105K6R3

RESISTORS

	R3202, R3210, R3216, R3224, R3229	RAB4C221J
	R3235	RAB4C221J
	Other Resistors	RS1/16S###J

OTHERS

	CN3201 13P CONNECTOR NONPB	AKP1261
	K3203, K3208, K3214, K3216, K3218	AKX9002
	K3221 TEST PIN	AKX9002

X CONNECTOR A ASSY

This assembly has no service part.

X CONNECTOR B ASSY

This assembly has no service part.

Mark	No.	Description	Part No.

KEY CONTROL ASSY

SEMICONDUCTORS

	IC4851	PD5719A
	D4851-D4853, D4855, D4856	DA204U

COILS AND FILTERS

	F4851- F4856	QTL1011

CAPACITORS

⚠	C4856-C4858	CCSSCH101J50
	C4854	CEAT470M50
	C4853	CKSRYB103K50

RESISTORS

	R4858	RAB4C182J
	R4861-R4863	RS1/16S101J
	Other Resistors	RS1/16SS###J

OTHERS

	CN4851 6P FFC CONNECTOR	AKM1272
⚠	X4851 CERALOCK	ASS1162
	CN4852 PLUG (4P)	KM200NA4

PANEL IR ASSY

SEMICONDUCTORS

	Q4901	2SC4116
	D4902	DA204U

CAPACITORS

	C4901	CEVW470M6R3
	C4902	CKSRYB103K50
	C4903	CKSSYB102K50
	C4904	CKSSYF104Z16

RESISTORS

	Other Resistors	RS1/16SS###J

OTHERS

	CN4901 L-PLUG (3P)	KM200NA3L
	U4901 REMOTE RECEIVER UNIT	RPM7240-H5

PANEL SENSOR ASSY

SEMICONDUCTORS

	IC1072	MM1522XU
	IC1071	MM3012XN

CAPACITORS

	C1071, C1074, C1075	CKSRYB103K50
	C1072, C1073	CKSRYF105Z10

RESISTORS

	R1073, R1074	RS1/16S1001F
	Other Resistors	RS1/16SS###J

OTHERS

	CN1071 PLUG (3P)	KM200NA3

Mark	No.	Description	Part No.

50 X DRIVE ASSY

[50 X LOGIC BLOCK]

SEMICONDUCTORS

	IC1002	TC74ACT540FT
	IC1001	TC74ACT541FT
	IC1003	TC74VHC08FT

CAPACITORS

	C1001	CEHAT470M25
	C1002-C1004	CKSSYB104K10

RESISTORS

	R1001, R1002, R1005	RAB4C470J
	R1003, R1004, R1007	RAB4C472J
	Other Resistors	RS1/16S###J

OTHERS

	CN1001 30P FFC CONNECTOR	AKM1218

[50 X RESONANCE BLOCK]

SEMICONDUCTORS

	IC1103	BA10393F
	IC1101, IC1102	TND506MD
	Q1113	2SC4116
	Q1102, Q1103, Q1111, Q1112	2SK3555-01MR
	Q1105, Q1108, Q1109	2SK3592-01S
	Q1101, Q1104, Q1107, Q1110	QSZ2
	D1109, D1122	1SS302
	D1112, D1119, D1135, D1136	1SS355
	D1101, D1102, D1104, D1105	D1FL40
	D1107, D1108, D1111, D1114-D1117	D1FL40
	D1120, D1121, D1127, D1128	D1FL40
	D1103, D1113, D1118, D1125	RF2001T3D
	D1129, D1130	RF2001T3D
	D1110, D1123	UDZS16(B)

COILS AND FILTERS

	L1103, L1105	ATH1119
	L1104	ATH1155
	L1102	ATH1156
	L1101	LFEA470J

CAPACITORS

	C1112, C1113, C1125-C1127	ACE1175
	C1111, C1124 (100P/630V)	ACG1104
	C1109, C1119 (0.22/250V)	ACG1112
	C1134, C1135 (150P/630V)	ACG1120
	C1101, C1105, C1116, C1117	CCSRCH331J50
	C1136	CEHAT2R2M50
	C1102, C1118	CKSRYB105K6R3
	C1128, C1130-C1132	CKSSYB104K10
	C1104, C1108, C1115, C1122	CKSYB105K25

RESISTORS

	R1116, R1122	RS1/10S1003F
	R1133, R1143-R1145	RS1/10S100J
	R1155, R1156	RS1/10S220J
	R1103, R1106, R1118, R1119, R1123	RS1/10S2R2J
	R1126, R1153	RS1/10S2R2J
	R1136	RS1/16S1202F
	R1139	RS1/16S3301F
	R1130	RS1/16S5601F
	R1134	RS1/16S8201F
	R1113, R1128	RS1MMF101J

Mark	No.	Description	Part No.
		R1147, R1148	RS2MMF220J
		VR1101-VR1104	CCP1390
		Other Resistors	RS1/16S###J
		OTHERS	
	1101	DRIVE HEATSINK	ANH1628
	1101	SCREW	PMH30P080FTC
		[50 X SUS BLOCK]	
		SEMICONDUCTORS	
		IC1202	HCPL-M611
		IC1205	NJM2872F05
		IC1203, IC1207	STK795-512A
		IC1206	TND301S
		IC1204, IC1209	TND307TD
		Q1209	2SA1727
		Q1203	2SD1898
		Q1205	2SK2865
		Q1208	DTC124EUA
		Q1201	HN1B04FU
		D1212	1SS302
		D1211, D1213	1SS355
		D1204, D1217	D1FL40
		D1201, D1207	EC10QS04
		D1208	UDZS5R6(B)
		COILS AND FILTERS	
		L1204, L1205	ATH1112
		L1202, L1207	LFEA100J
		L1203, L1206	LFEA470J
		CAPACITORS	
		C1214-C1216, C1228-C1230	ACE1163
		C1245	ACE1173
		C1209 (0.1/630V)	ACG1092
		C1219, C1231	ACH1415
		C1246	CEHAT221M25
		C1201, C1203, C1207, C1220	CEHAT470M25
		C1223, C1224, C1238, C1239, C1248	CEHAT470M25
		C1212, C1213, C1225, C1240, C1241	CKSRYB104K16
		C1243	CKSRYB104K16
		C1202, C1205, C1206, C1247	CKSRYF104Z50
		RESISTORS	
		R1230	ACN1166
		R1208, R1260, R1261	ACN1174
		R1255	ACN1178
		R1256	ACN1198
		R1226, R1251	RS1MMF331J
		R1235, R1236	RS2MMF121J
		Other Resistors	RS1/16S###J
		OTHERS	
		KN1201-KN1205, KN1208	ANK-142
		KN1210-KN1212, KN1214	ANK-142
		GROUND PLATE	
		CN1201 CONNECTOR	B12B-EH

Mark	No.	Description	Part No.
		[50 X D-DCON BLOCK]	
		SEMICONDUCTORS	
		IC1402	MIP2E3DMU
		IC1401, IC1403	PS2701A-1(L)
		IC1404	TA76431FR
		Q1401	2SA1576A
		Q1402	2SC4116
		D1406, D1409, D1410	D1FK70
		D1407, D1408	D1FL20U(S)
		D1405	U1ZB330
		D1401, D1403	UDZS5R6(B)
		COILS AND FILTERS	
⚠		T1401	ATK1153
		L1401	LFEA101J
		CAPACITORS	
		C1401, C1402	ACH1361
		C1404	CEHAT101M16
		C1405	CEHAT101M25
		C1409	CEHAT331M16
		C1403, C1407, C1408, C1411	CKSRYB104K16
		C1406	CKSRYF104Z50
		RESISTORS	
		R1405, R1406, R1408-R1410, R1414	RS1/10S3602F
		R1420	RS1/16S1101F
		R1403	RS1/16S2702F
		R1401, R1404	RS1/16S4701F
		R1417	RS1/16S7500F
		VR1401	CCP1390
		Other Resistors	RS1/16S###J
		OTHERS	
⚠	1001	DRIVE SIRICON SHEET	AEH1062
	1001	PLATE X	ANG2664
	1001	DRIVE HEATSINK A	ANH1613
	1001	SCREW	PMZ30P080FTC
	1002	SCREW	PMB30P060FNI

50 Y DRIVE ASSY

Mark	No.	Description	Part No.
		OTHERS	
	2002	CARD SPACER	AEC1957
⚠	2001	DRIVE SIRICON SHEET	AEH1062
	2001	PLATE Y	ANG2557
	2001	DRIVE HEATSINK A	ANH1613
	2001	SCREW	PMZ30P080FTC
	2002	SCREW	PMB30P060FNI
		[50 Y LOGIC BLOCK]	
		SEMICONDUCTORS	
		IC2002	TC74ACT540FT
		IC2001, IC2003	TC74ACT541FT
		IC2005, IC2006	TC74VHC08FT
		IC2004	TC74VHC541FT
		CAPACITORS	
		C2001	CEHAT470M16
		C2007	CKSRYB471K50
		C2002-C2006, C2008	CKSSYB104K10

Mark No.	Description	Part No.
	RESISTORS	
	R2045	RAB4C0R0J
	R2055	RAB4C100J
A	R2025	RAB4C101J
	R2018, R2019	RAB4C102J
	R2002, R2004, R2013-R2015	RAB4C470J
	R2005, R2006, R2012, R2016, R2017	RAB4C472J
	Other Resistors	RS1/16S###J
	OTHERS	
	CN2001 50P CONNECTOR	AKM1201
	[50 Y SCAN BLOCK]	
	SEMICONDUCTORS	
B	IC2101, IC2103-IC2106, IC2108, IC2109	HCPL-M611
	IC2111, IC2112	PST3638UR
	IC2102, IC2107	TC74ACT540FT
	COILS AND FILTERS	
	L2101-L2103	LFEA100J
	CAPACITORS	
	C2104, C2111	ACH1413
	C2101, C2107, C2113	CEHAT221M16
	C2118, C2119	CKSRYB102K50
	C2116, C2117	CKSRYB471K50
C	C2102, C2103, C2105, C2106	CKSSYB104K10
	C2108-C2110, C2112, C2114	CKSSYB104K10
	RESISTORS	
	R2138, R2141	RAB4C0R0J
	R2121, R2128	RAB4C472J
	Other Resistors	RS1/16S###J
	OTHERS	
	CN2101, CN2102 15P CONNECTOR	AKM1200
D		
	[50 Y RESONANCE BLOCK]	
	SEMICONDUCTORS	
	IC2211	BA10393F
	IC2201, IC2202	TND506MD
	Q2213	2SC4081
	Q2205, Q2206, Q2208, Q2209	2SK3555-01MR
	Q2202, Q2203, Q2212	2SK3592-01S
	Q2201, Q2204, Q2207, Q2210	QSZ2
	D2209, D2223	1SS302
	D2228, D2229, D2232, D2233	1SS355
E	D2202-D2205, D2207, D2208	D1FL40
	D2212-D2214, D2216-D2219	D1FL40
	D2221, D2222	D1FL40
	D2201, D2206, D2211, D2220, D2225	RF2001T3D
	D2230	RF2001T3D
	D2210, D2224	UDZS16(B)
	COILS AND FILTERS	
	L2203, L2205	ATH1119
	L2202	ATH1155
	L2204	ATH1156
F	L2201	LFEA470J

Mark No.	Description	Part No.
	CAPACITORS	
	C2212-C2214, C2226, C2227	ACE1175
	C2211, C2224 (100P/630V)	ACG1104
	C2210, C2223 (0.22UF/250V)	ACG1112
	C2238, C2240 (150P/630V)	ACG1120
	C2202, C2205, C2216, C2217	CCSRCH331J50
	C2236	CEHAT2R2M50
	C2203, C2218	CKSRYB105K6R3
	C2230, C2232, C2233, C2235	CKSSYB104K10
	C2201, C2208, C2215, C2219	CKSYB105K25
	RESISTORS	
	R2240, R2241	RS1/10S1003F
	R2244-R2247	RS1/10S100J
	R2260, R2261	RS1/10S220J
	R2205, R2211, R2213, R2220, R2221	RS1/10S2R2J
	R2253, R2265	RS1/10S2R2J
	R2234	RS1/16S1202F
	R2235	RS1/16S3301F
	R2233	RS1/16S5601F
	R2242	RS1/16S8201F
	R2215, R2230	RS1MMF101J
	R2256, R2259	RS2MMF220J
	VR2201-VR2204	CCP1390
	Other Resistors	RS1/16S###J
	OTHERS	
	2201 DRIVE HEATSINK	ANH1628
	2201 SCREW	PMH30P080FTC
	[50 Y SUS BLOCK]	
	SEMICONDUCTORS	
	IC2302	HCPL-M611
	IC2305	NJM2872F05
	IC2303, IC2307	STK795-513A
	IC2310	TC7SH04FU
	IC2301, IC2304	TND301S
	IC2311	TND307TD
	Q2313	2SA1727
	Q2310	2SC4081
	Q2303	2SD1898
	Q2302	2SK3325-Z
	Q2312	2SK3403
	Q2309	HN1B04FU
	D2322	1SS302
	D2312, D2325	1SS355
	D2324	D1FL40
	D2319	EC10QS04
	D2320	RF051UA1D
	D2323	UDZS16(B)
	D2306	UDZS5R6(B)
	COILS AND FILTERS	
	L2306, L2307	ATH1112
	L2304, L2309	LFEA100J
	L2308	LFEA101J
	L2301, L2302, L2305	LFEA470J

Mark No.	Description	Part No.
CAPACITORS		
	C2309-C2311, C2327, C2329, C2330	ACE1163
	C2314	ACE1165
	C2346 (0.33/100V)	ACG1118
	C2336	ACH1393
	C2316, C2331	ACH1415
	C2303, C2342	ACH1416
	C2343	CCSRCH102J50
	C2306	CEHAT221M25
	C2308, C2324, C2339, C2340, C2349	CEHAT470M16
	C2304, C2320, C2338, C2348	CEHAT470M25
	C2305, C2322, C2323, C2325, C2341	CKSRYB104K16
	C2347	CKSRYB105K6R3
	C2301, C2307, C2344	CKSRYF104Z50
RESISTORS		
	R2332	ACN1166
	R2364, R2365	ACN1174
	R2367	RS1/10S0R0J
	R2368	RS1/10S151J
	R2309	RS1MMF132J
	R2310, R2311	RS1MMF472J
	R2312, R2313, R2322, R2325	RS3LMF100J
	R2348, R2352, R2358, R2359	RS3LMF1R8J
	Other Resistors	RS1/16S###J
OTHERS		
	KN2301-KN2305, KN2310, KN2312	ANK-142
	KN2314, KN2316 GROUND PLATE	ANK-142
	CN2301 CONNECTOR	B11B-EH

[50 Y D-DCON BLOCK]

Mark No.	Description	Part No.
SEMICONDUCTORS		
	IC2406	BA10358F
	IC2401	MIP2E3DMC
	IC2402-IC2405, IC2407, IC2409	PS2701A-1(L)
	IC2410-IC2412	TA76431FR
	Q2402, Q2407	2SA1037K
	Q2410	2SA1163
	Q2417	2SA2005
	Q2405	2SC2713
	Q2411-Q2413, Q2416, Q2419	2SC4081
	Q2403	2SD1664
	Q2401, Q2404	2SD1898
	Q2415	HN1C01FU
	D2430	1SS301
	D2410, D2419, D2436	1SS302
	D2409, D2418	1SS355
	D2402	D1FK70
	D2404-D2407	D1FL20U(S)
	D2414	D1FL40
	D2403	EC8FS6
	D2401	U1ZB330
	D2412, D2413, D2422	UDZS15(B)
	D2437, D2438	UDZS33(B)
	D2432	UDZS4R3(B)
	D2423, D2431	UDZS5R6(B)

Mark No.	Description	Part No.
COILS AND FILTERS		
	⚠T2402	ATK1156
	⚠T2403	ATK1157
	⚠T2401	ATK1158
	L2402	LFEA100J
	L2401	LFEA101J
	L2403	LFEA470J
CAPACITORS		
	C2406	ACH1360
	C2401	ACH1361
	C2427	CEHAT100M50
	C2403	CEHAT101M16
	C2405, C2407, C2417	CEHAT101M25
	C2414	CEHAT221M16
	C2410	CEHAT221M25
	C2411	CEHAT331M25
	C2420	CEHAT470M2A
	C2409, C2419	CKSRYB103K50
	C2402, C2412, C2413, C2423, C2425	CKSRYB104K16
	C2434-C2436, C2441-C2444	CKSRYB104K16
	C2415, C2421, C2428	CKSRYB105K6R3
	C2404, C2408, C2416, C2418, C2426	CKSRYF104Z50
	C2429	CKSRYF104Z50
RESISTORS		
	R2429	ACN1225
	R2435, R2439	RS1/10S2202F
	R2402-R2404	RS1/10S3902F
	R2442	RS1/16S1201F
	R2468	RS1/16S1202F
	R2424	RS1/16S2001F
	R2420, R2427, R2438	RS1/16S2201F
	R2451	RS1/16S2202F
	R2467	RS1/16S3301F
	R2452, R2453	RS1/16S3302F
	R2457-R2460	RS1/16S4701F
	R2506	RS3LMF151J
	VR2401, VR2402	CCP1390
	Other Resistors	RS1/16S###J
OTHERS		
	2401 HEATSINK	ANH1614
	2401 SCREW	BBZ30P080FTC

• PCB Parts for PDP-4350SX and PDP-5050SX

Mark	No.	Description	Part No.

TUNER BOARD ASSY

OTHERS

		TUNER MODULE	AXF1125
	13	SCREW	ABZ30P060FTC
	10	WIND REFLECTOR 2	AEC2011
⚠	90	GASKET C	AEC2014
	2	WIND REFLECTOR(SX)	AEC2022
⚠	5	GASKET A	AEC7528
	11	CASE TOP	ANG2659
⚠	4	PCMCIA EJECTOR	ANG2673
⚠	9	GROUND PLATE B	ANG2699
	7	TOP COVER(METAL)	ANG2706
	15, 3	SCREW	BBZ30P080FTC
	12	RIVET A	BEC1158
	14	SCREW	PMB20P100FT

[I/O POWER BLOCK]
SEMICONDUCTORS

IC1012	24LC256T(I)SNG
IC1015	BA00BC0WFP
IC1021	CY2305SC-1H
IC1022	KA5SDKAS01TSN
IC1007, IC1016	MM1562FF
IC1006	MM1563DF
IC1004, IC1005, IC1023	MM1565AF
IC1008, IC1009	NJM2370U09
IC1010	PST3622NR
IC1013, IC1014	R1224N102H
IC1019	S-L2980A15MC-C6A
IC1011	TC7S08FU
Q1006, Q1012	2SA1576A
Q1008, Q1009	CPH5802
Q1005	DTC124EUA
Q1001, Q1010, Q1011, Q1013	RN1901
Q1003	UMD2N
D1001	1SS355
D1003-D1009, D1014, D1019	RB501V-40

COILS AND FILTERS

L1003, L1004	ATH1161
L1008, L1010	BTX1039
L1005-L1007, L1009, L1011-L1018	BTX1042
F1001, F1002	VTF1084

CAPACITORS

C1049, C1051, C1090	BCG1054
C1078	BCG1059
C1048	CCSRCH102J50
C1019-C1022, C1057, C1089	CCSRCH471J50
C1008	CEHVKW100M50
C1001, C1010, C1054-C1056, C1060	CEHVKW101M6R3
C1064	CEHVKW101M6R3
C1009, C1014, C1015, C1034, C1035	CEHVKW470M16
C1053, C1070	CEHVKW470M16
C1032, C1039-C1041, C1061, C1076	CKSQYB225K10
C1088	CKSQYB225K10
C1036	CKSRYB103K50
C1027-C1029, C1031, C1042, C1045	CKSRYF105Z10
C1059, C1075, C1087	CKSRYF105Z10
C1002, C1012, C1013, C1016, C1017	CKSSYB103K16
C1026, C1030, C1037, C1038	CKSSYB103K16
C1043, C1044, C1050, C1058, C1062	CKSSYB103K16
C1065, C1069, C1074, C1085, C1086	CKSSYB103K16
C1018, C1023-C1025, C1046, C1047	CKSSYF104Z16
C1052, C1084, C1091	CKSSYF104Z16

RESISTORS

R1073, R1074	RS1/10S271J
R1035	RS1/16SS1103F
R1039	RS1/16SS1202F
R1043	RS1/16SS1503F
R1019	RS1/16SS2202F
R1032	RS1/16SS5102F
R1021	RS1/16SS5602F
R1041	RS1/16SS9102F
R1080, R1081, R1109	RS1/4S1R5J
R1015, R1042	RS1/4S3R3J
Other Resistors	RS1/16S###J

OTHERS

CN1001 40P CONNECTER	AKM1217
CN1002 12p CONNECTOR	AKM1298
CN1003 14p CONNECTOR	AKM1300
X1001 27.0000MHz	BSS1123

[FRONT END BLOCK]
SEMICONDUCTORS

IC1502	BA10358F
IC2002	BCM3510KPFG
IC1501	TC7W66FU
IC1503	UPC1663GV
IC4503	UPC3220GR
Q1503-Q1505	2SC5084
Q1501	RN1901
D1501, D1502	1SS312

COILS AND FILTERS

F4502	ATF1215
F1501, F1502	BTF1079
L1504, L1505	BTH1121
L4564	LCTAW1R5J2520
L4565	LCYA10NJ2520
L4503	LCYA56NJ2520
L4502, L4505	LCYA68NJ2520
L4501, L4509	LCYA82NJ2520
L4507	LCYAR10J2520
L1501	LCYAR68J2520
F1504-F1507, F1510, F1511, F1514	VTF1084
F2001-F2004, F4504	VTF1084

CAPACITORS

C1505, C1521	ACH1421
C1501, C1509, C2001, C2002, C2015	BCG1054
C2018, C2019, C2038, C2039	BCG1054
C4505	CCSRCH271J50
C4504	CCSSCH100D50
C4501, C4513, C4534	CCSSCH101J50
C4511	CCSSCH120J50
C2033, C2040	CCSSCH220J50
C4502, C4503, C4509	CCSSCH270J50
C4515, C4517	CCSSCH390J50

Mark No.	Description	Part No.
C4507		CCSSCH560J50
C1516, C1531, C1536		CEHVKW100M16
C1508		CEHVKW100M50
C1510		CEHVKW101M25
C1507		CKSRYB103K50
C1503, C4518, C4524, C4528		CKSSYB102K50
C4532, C4533, C4535		CKSSYB102K50
C1502, C1504, C1506, C1511, C1512		CKSSYB103K16
C1514, C1517, C1519, C1522-C1526		CKSSYB103K16
C1528-C1530, C1534, C1537-C1548		CKSSYB103K16
C1552, C2003-C2014, C2016, C2017		CKSSYB103K16
C2020-C2032, C2035-C2037, C4520		CKSSYB103K16
C4525, C4530, C4544, C4546, C4547		CKSSYB103K16
C4551-C4553		CKSSYB103K16
C1515, C1518, C1533		CKSSYB104K10
C1513, C1535		CKSSYF104Z16
RESISTORS		
R1548		RS1/16SS1001F
R1557		RS1/16SS2201F
Other Resistors		RS1/16S###J
OTHERS		
X2001 26.800MHz		ASS1186
[POD BLOCK]		
SEMICONDUCTORS		
IC2501		109865-PBF
IC2502		TC74LCX244FT
IC2504		TC74LCX245FT
IC2503		TC74LCX257FT
IC2505, IC2506		TC74LCX373FT
CAPACITORS		
C2510		CCSSCH680J50
C2502-C2509		CKSSYF104Z16
RESISTORS		
R2259, R2503, R2507, R2511-R2513		BCN1067
R2510, R2521, R2559		RAB4C103J
R2535, R2546, R2552, R2553		RAB4C470J
Other Resistors		RS1/16S###J
OTHERS		
CN2501 PCMCIA CONNECTOR		AKP1259
[SYSTEM IC BLOCK]		
SEMICONDUCTORS		
IC5501		BCM7021RKPB1G-D0
IC3001		BCM7115A3KPBG
IC5502		CY22381FSZC-147
IC5201		PE5434A
IC3003, IC3004		TC7SA08FU
D5201		RB501V-40
COILS AND FILTERS		
F3014		ATF1212
F3003, F3004, F3006-F3008		VTF1084
F3010-F3013, F3015, F5501-F5504		VTF1084
F5506, F5507		VTF1084
CAPACITORS		
C3035, C3036, C5532		BCG1054
C5502		BCG1059

Mark No.	Description	Part No.
C3105		CCSSCH220J50
C3095, C3096		CCSSCH5R0C50
C3103		CEHVKW100M16
C5514		CEHVKW101M6R3
C3016		CKSRYF105Z10
C3085, C3093		CKSSYB102K50
C3024, C3025, C3027, C3029		CKSSYB103K16
C3033, C3034, C3038, C3053, C3058		CKSSYB103K16
C3065, C3066, C3089, C3091		CKSSYB103K16
C5201-C5212, C5501, C5503-C5513		CKSSYB103K16
C5515-C5531, C5533-C5535		CKSSYB103K16
C3001, C3002, C3004-C3010		CKSSYB104K10
C3012-C3015, C3017, C3018		CKSSYB104K10
C3020-C3023, C3026, C3028		CKSSYB104K10
C3031, C3032, C3040, C3041		CKSSYB104K10
C3043-C3045, C3047-C3049		CKSSYB104K10
C3051, C3052, C3054-C3057, C3059		CKSSYB104K10
C3061, C3064, C3067-C3070, C3072		CKSSYB104K10
C3074-C3076, C3078, C3080, C3081		CKSSYB104K10
C3084, C3086-C3088, C3090, C3092		CKSSYB104K10
C3100, C3101, C3106		CKSSYB104K10
RESISTORS		
R3062-R3066		BCN1067
R5003, R5007, R5501, R5526		BCN1072
R3079		RAB4C102J
R3048		RAB4C103J
R3021, R5545, R5547, R5548		RAB4C330J
R5507, R5522, R5524		RAB4C472J
R5528, R5529, R5532		RAB4C560J
R3036, R3037		RS1/16S1002F
R5513		RS1/16S1371F
R5585		RS1/16S3240F
R3005, R3028		RS1/16S4021F
Other Resistors		RS1/16S###J
OTHERS		
X3001 25.000MHz		ASS1185
[MEMORY BLOCK]		
SEMICONDUCTORS		
IC6001-IC6004		IC42S16800-6TG
IC3501, IC3505		K4H561638F-UCB3
IC3503		PC28F128K3C115
COILS AND FILTERS		
F6001-F6004		ATF1212
F6005-F6008		VTF1084
CAPACITORS		
C3509		CEHVKW101M6R3
C3502-C3508, C3510-C3515		CKSSYB103K16
C3518, C3519, C3521-C3523		CKSSYB103K16
C3526, C3527, C3529, C6001-C6028		CKSSYB103K16
C3516, C3517, C3524, C3525		CKSSYB104K10
RESISTORS		
R3531		RAB4C103J
R6001, R6006		RAB4C330J
R3521, R3540		RS1/16S1210F
Other Resistors		RS1/16S###J

Mark No.	Description	Part No.
	OTHERS	
	CN3501 80P CONNECTOR RCPT	BKP1159
	[AUDIO/VIDEO BLOCK]	
	SEMICONDUCTORS	
	IC4007	AK5381VT
	IC4005	CY24216SC-1
	IC4001, IC4003, IC4006	NJM2068V
	IC8501	TC90A92AFG
	Q4001-Q4003, Q8502	2SA1576A
	Q8501	2SC4081
	COILS AND FILTERS	
	L4004, L4005	BTH1107
	L8508	LCTAW1R5J2520
	F4004-F4007, F8501, F8504-F8507	VTF1084
	F8509-F8511	VTF1084
	CAPACITORS	
	C4003, C4018, C4078, C8503, C8519	BCG1054
	C8521-C8523, C8542, C8544	BCG1054
	C4019, C4079, C4085	BCG1059
	C8506	CCSRCH151J50
	C4001, C4002	CCSRCH391J50
	C4038, C4039	CCSRCH471J50
	C4036, C4037, C4070, C8550	CCSSCH101J50
	C8532	CCSSCH180J50
	C8528	CCSSCH220J50
	C4009, C4010	CCSSCH221J50
	C4004, C4005, C4007, C4008	CCSSCH390J50
	C8502	CCSSCH4R0C50
	C4011, C4012	CEHVKW470M16
	C4021, C4024	CKSQYB225K10
	C8524	CKSRYB152K50
	C8501	CKSRYB474K10
	C4015, C8531	CKSSYB102K50
	C4006, C4013, C4014, C4027, C4028	CKSSYB103K16
	C4040, C4059, C4083, C4084	CKSSYB103K16
	C8507-C8511, C8513-C8516, C8518	CKSSYB103K16
	C8527, C8529, C8530, C8533-C8540	CKSSYB103K16
	C8549, C8554	CKSSYB103K16
	C4025, C4029, C4073, C4080, C4081	CKSSYB104K10
	C8512, C8517, C8520, C8545-C8548	CKSSYB104K10
	C4067, C4068	CKSSYB821K50
	C4047, C4053, C4054, C4057, C4061	CKSSYF104Z16
	C4082	CKSSYF104Z16
	RESISTORS	
	R8511	BCN1070
	R4025, R4026	RS1/16SS1002F
	R4013, R4014, R4048, R4049	RS1/16SS2402F
	R4052, R4053	RS1/16SS2402F
	Other Resistors	RS1/16S###J
	OTHERS	
	X8501 42MHz	ASS1184
	JA4001 OPTICAL OUT MOD.	GP1FM513TZ
	[DIGITAL VIDEO BLOCK]	
	SEMICONDUCTORS	
	IC7501	PE5436A
	IC7503-IC7505	TC74LCX541FT
	COILS AND FILTERS	
	F7501-F7504	VTF1084
	CAPACITORS	
	C7507	BCG1054
	C7501-C7506, C7508, C7510, C7511	CKSSYB104K10
	RESISTORS	
	R7540, R7541	BCN1067
	R7518	RAB4C0R0J
	Other Resistors	RS1/16S###J
	OTHERS	
	CN7501 50P CONNECTER	AKM1236
	[IEEE1394 BLOCK]	
	SEMICONDUCTORS	
	IC8004	PST3622NR
	IC8003	TC74LCX125FT
	IC8005	TC7S08FU
	IC8006	TC7SA08FU
	IC8001	TSB43CA42ZGW
	Q8001	DTC124EUA
	COILS AND FILTERS	
	F8001, F8002	DTL1106
	F8003	VTF1084
	CAPACITORS	
	C8012, C8013	CCSSCH100D50
	C8026, C8027	CCSSCH221J50
	C8024, C8025	CKSRYB105K6R3
	C8014, C8019	CKSRYF104Z16
	C8029-C8031	CKSSYB102K50
	C8033, C8034	CKSSYB103K16
	C8037	CKSSYB104K10
	C8001-C8011, C8015-C8018	CKSSYF104Z16
	C8020-C8023, C8032, C8036	CKSSYF104Z16
	RESISTORS	
	R8001, R8002, R8013	BCN1070
	R8033, R8036, R8050, R8064	BCN1072
	R8004	RAB4C0R0J
	R8030	RAB4C472J
	R8077, R8079	RS1/16SS5101F
	R8065-R8068, R8073, R8074, R8076	RS1/16SS56R0D
	R8078	RS1/16SS56R0D
	R8051	RS1/16SS6341D
	Other Resistors	RS1/16S###J
	OTHERS	
	X8001 24.576MHz	VSS1192

DIGITAL VIDEO ASSY

⚠DD CON UNIT	AXY1086
[DIGITAL IF BLOCK]	
SEMICONDUCTORS	
IC4206	BA8274F
IC4201	NCP1117DT33
IC4205	PST3628UR
IC4202	SII169CTG100
Q4201, Q4203, Q4205, Q4207	DTC143EUA

Mark No.	Description	Part No.
Q4204		RN1901
Q4202, Q4215		SM6K2
D4201, D4203, D4204		1SS355
D4202		UDZS6R8(B)
COILS AND FILTERS		
F4205		ATF1213
L4201		ATH1162
CAPACITORS		
C4208, C4215, C4218, C4222, C4230		CCSRCH331J50
C4262		CCSRCH471J50
C4201, C4214		CCSSCH100D50
C4207, C4210, C4232, C4233, C4236		CCSSCH820J50
C4241, C4244, C4258		CCSSCH820J50
C4221, C4223, C4242, C4246		CEHVKW101M6R3
C4202, C4237, C4238		CEHVKW470M16
C4216, C4219, C4220, C4224		CKSRYB103K50
C4260		CKSRYB472K50
C4203, C4213, C4240, C4243, C4247		CKSSYF104Z16
C4261, C4271		CKSSYF104Z16
RESISTORS		
R4241		RAB4CQ220J
R4213-R4218, R4245, R4247		RAB4CQ470J
R4253-R4255, R4257		RAB4CQ470J
R4250		RS1/16S3900F
Other Resistors		RS1/16S###J
OTHERS		
CN4201 31P CONNECTER		AKM1239
CN4203, CN4204 9P CONNECTOR		AKM1280
K4207 TEST PIN		AKX9002
[MODULE UCOM BLOCK]		
SEMICONDUCTORS		
IC5206		BR24L04FJ-W
IC5201		M30622F8PGP-K
IC5205		PST3628UR
IC5208		SN74AHC08PW
IC5214, IC5215		SN74AHC32PW
IC5202, IC5211, IC5212		SN74AHC541PW
IC5209		TC7W126FU
Q5201		2SJ461A
Q5202		DTC143EUA
Q5203		RN1901
D5217		1SS355
D5207-D5212		DAN202U
D5201		SML-310LT
SWITCHES AND RELAYS		
S5201		ASH1047
CAPACITORS		
C5214		CCSRCH101J50
C5216		CCSRCH471J50
C5213, C5225		CEHVKW470M6R3
C5217		CKSRYB103K50
C5205		CKSRYB472K50
C5206, C5223, C5231, C5245-C5264		CKSSYB102K50
C5201-C5204, C5207, C5208		CKSSYF104Z16
C5210-C5212, C5218, C5224		CKSSYF104Z16
C5226, C5227, C5243, C5244		CKSSYF104Z16

Mark No.	Description	Part No.
RESISTORS		
R5209, R5211, R5212, R5235		RAB4C101J
R5254, R5255, R5265, R5266		RAB4C101J
R5205		RAB4C103J
R5270, R5271		RAB4C472J
R5256, R5257		RAB4C474J
Other Resistors		RS1/16S###J
OTHERS		
CN5201 PLUG 8-P		AKM1225
CN5202 3P CONNECTOR		AKM1274
⚠X5201 CERAMIC RESONATOR		ASS1178
[PANEL FLASH BLOCK]		
SEMICONDUCTORS		
IC5305		MBM29PL160BD-75PFTN
IC5303		PST3612UR
IC5301		PST3628UR
IC5302		SN74AHC08PW
Q5301		RN1901
D5301-D5310		DA204U
CAPACITORS		
C5320		CCSRCH470J50
C5321, C5322		CCSRCH471J50
C5311, C5314		CKSRYB104K16
C5303, C5306		CKSRYB472K50
C5304, C5307		CKSSYB102K50
C5301, C5302, C5305, C5309, C5313		CKSSYF104Z16
C5316		CKSSYF104Z16
RESISTORS		
R5317, R5318		RAB4C101J
Other Resistors		RS1/16S###J
OTHERS		
CN5301 PLUG 15-P		AKM1232
⚠X5302 CRYSTAL OSCILLATOR		ASS1174
⚠X5301 CRYSTAL OSCILLATOR		ASS1182
[IC4 BLOCK]		
SEMICONDUCTORS		
IC5401		PEG054A-K
D5401		SML-310LT
D5402		SML-310MT
COILS AND FILTERS		
F5401, F5403, F5409, F5410		ATF1213
CAPACITORS		
C5401, C5413, C5417, C5424		CEHVKW101M6R3
C5434, C5435		CKSSYB102K50
C5402-C5412, C5414-C5416		CKSSYF104Z16
C5418-C5423, C5425-C5431		CKSSYF104Z16
RESISTORS		
R5406, R5421		RAB4C101J
R5408-R5413, R5415, R5416, R5419		RAB4C220J
R5422		RAB4C220J
R5405		RS1/16S5601F
Other Resistors		RS1/16S###J

Mark	No.	Description	Part No.
		[ADDRESS CN BLOCK]	
		RESISTORS	
		Other Resistors	RS1/16S###J
		OTHERS	
		CN5521 50P CONNECTER	AKM1201
⚠		CN5501-CN5508 40P CONNECTER	AKM1217
		CN5511 30P FFC CONNECTER	AKM1218
		[DIGITAL DD CON BLOCK]	
		SEMICONDUCTORS	
⚠		IC5605	BA90BC0FP
⚠		IC5604	MM1665AT
		Q5601	HN1C01FU
		D5602, D5609	DAN202U
		D5601	HZU2R2(B)
		D5604	UDZS5R1(B)
		CAPACITORS	
		C5601, C5603, C5614, C5616	ACH1394
		C5602, C5604, C5615, C5617	CKSRYB103K50
		C5605, C5606	CKSSYF104Z16
		RESISTORS	
		Other Resistors	RS1/16S###J
		OTHERS	
⚠		CN5602 7P CONNECTOR	AKM1278
⚠		CN5601 11P CONNECTOR	AKM1282

MAIN BOARD ASSY

Mark	No.	Description	Part No.
		[GCR BLOCK]	
		RESISTORS	
		Other Resistors	RS1/16S###J
		[MICHAEL BLOCK]	
		SEMICONDUCTORS	
		IC6106	HY57V161610ETP-8
		IC6107, IC6255	PD0278A
		IC6101	TC7W126FU
		Q6104, Q6105, Q6108, Q6109, Q6258	2SA1586
		Q6101, Q6102, Q6251, Q6252	HN1A01FU
		Q6106, Q6107, Q6256, Q6257	HN1B04FU
		Q6103	RN1303
		COILS AND FILTERS	
		F6101, F6103-F6107, F6251-F6254	CCG1162
		L6107, L6257	LCTAW220J2520
		L6101-L6104, L6251-L6254	LCYC6R8K2125
		CAPACITORS	
		C6102	ACG7046
		C6126, C6142, C6163, C6164	CCSRCH330J50
		C6171, C6172, C6272, C6288	CCSRCH330J50
		C6305, C6306, C6312, C6313	CCSRCH330J50
		C6266, C6267	CCSRCH470J50
		C6127, C6143, C6273, C6289	CCSRCH680J50
		C6182, C6184, C6186, C6188, C6251	CEHVKW101M6R3
		C6321, C6327	CEHVKW101M6R3
		C6151, C6297	CKSQYB225K10
		C6112, C6114, C6258, C6260	CKSRYB102K50
		C6119, C6136, C6153, C6154	CKSRYB104K16
		C6168, C6169, C6177, C6265, C6282	CKSRYB104K16
		C6299, C6300, C6309, C6310, C6316	CKSRYB104K16
		C6101, C6155, C6175, C6190, C6264	CKSRYB105K6R3
		C6295, C6301, C6314	CKSRYB105K6R3
		C6185, C6324	CKSRYB224K16
		C6103, C6104, C6107-C6111, C6113	CKSSYF104Z16
		C6116, C6123-C6125, C6130-C6133	1CKSSYF104Z16
		C6140, C6141, C6146-C6150, C6152	CKSSYF104Z16
		C6156-C6162, C6165-C6167, C6170	CKSSYF104Z16
		C6173, C6174, C6176, C6178-C6181	CKSSYF104Z16
		C6183, C6187, C6189, C6253-C6257	CKSSYF104Z16
		C6259, C6262, C6269-C6271	CKSSYF104Z16
		C6276-C6279, C6286, C6287	CKSSYF104Z16
		C6292-C6294, C6296, C6298	CKSSYF104Z16
		C6302-C6304, C6307, C6308, C6311	CKSSYF104Z16
		C6315, C6317-C6320, C6331	CKSSYF104Z16
		RESISTORS	
		R6101, R6104-R6106, R6120	RAB4CQ100J
		R6124, R6125, R6251-R6254, R6271	RAB4CQ100J
		R6275, R6276	RAB4CQ100J
		R6132-R6134, R6329-R6331	RAB4CQ103J
		R6146, R6159, R6163, R6166, R6178	RAB4CQ330J
		R6180, R6184	RAB4CQ330J
		R6194-R6196, R6321-R6323	RS1/16S1000F
		R6147, R6291	RS1/16S1301F
		R6126, R6138, R6277, R6288	RS1/16S2701F
		R6167, R6168, R6306, R6307	RS1/16S8201F
		Other Resistors	RS1/16S###J
		OTHERS	
		X6101 CRYSTAL OSCILLATOR	ASS1175
		[AD BLOCK]	
		SEMICONDUCTORS	
		IC6402, IC6602	AD80058-K
		IC6404, IC6604	BA7078AF
		IC6406	MM1389XFBE
		IC6401, IC6601	SM5301BS
		IC6405, IC6408, IC6603, IC6607	TC74VHC126FT
		Q6405, Q6605	HN1B04FU
		Q6401, Q6601	RN1303
		COILS AND FILTERS	
		F6401-F6404, F6601-F6604	CCG1162
		CAPACITORS	
		C6422, C6441, C6622, C6640, C6656	ACG7046
		C6445, C6644	CCSRCH151J50
		C6438, C6638	CKSRYB103K50
		C6404, C6424, C6604, C6624	CKSRYB104K16
		C6408, C6411, C6412, C6421, C6431	CKSRYB105K6R3
		C6434, C6435, C6450-C6455, C6608	CKSRYB105K6R3
		C6611, C6612, C6621, C6631	CKSRYB105K6R3
		C6633, C6634	CKSRYB105K6R3
		C6409, C6414, C6423, C6609, C6614	CKSRYB473K16
		C6623	CKSRYB473K16
		C6443, C6642	CKSRYB474K10
		C6442, C6641	CKSRYB562K50
		C6402, C6602	CKSRYB822K50
		C6401, C6601	CKSRYB823K16

Mark No.	Description	Part No.
	C6403, C6405-C6407, C6410, C6413	CKSSYF104Z16
	C6415-C6420, C6425-C6429, C6437	CKSSYF104Z16
	C6439, C6440, C6444, C6448, C6603	CKSSYF104Z16
	C6605-C6607, C6610, C6613	CKSSYF104Z16
	C6615-C6620, C6625-C6629, C6639	CKSSYF104Z16
	C6643, C6645, C6647	CKSSYF104Z16
RESISTORS		
	R6482, R6489, R6681, R6685	RAB4CQ101J
	R6405, R6410, R6418, R6424	RAB4CQ330J
	R6438, R6439, R6608, R6613, R6621	RAB4CQ330J
	R6627, R6643, R6644	RAB4CQ330J
	R6404, R6408, R6409, R6416, R6417	RS1/16S1000F
	R6423, R6607, R6611, R6612	RS1/16S1000F
	R6619, R6620, R6626	RS1/16S1000F
	R6422, R6625	RS1/16S1101F
	R6401, R6601	RS1/16S2701F
	Other Resistors	RS1/16S###J
[HDMI RX BLOCK]		
SEMICONDUCTORS		
	IC6880	BR24L02FJ-W
	IC6803	PCM1742KE
	IC6881	SII9993CTG100
	IC6806	TC74HC4538AFT
	Q6888, Q6889	2SA1586
	Q6885, Q6886	2SC4116
	Q6884, Q6887	RN1303
	Q6881	RN1902
	Q6882	RN2303
	Q6880	SM6K2
	D6880, D6881	1SS302
	D6808	1SS355
	D6806, D6807, D6884	DAN202U
	D6883	UDZS6R8(B)
COILS AND FILTERS		
	F6881	CCG1162
CAPACITORS		
	C6802, C6849, C6851	ACG7046
	C6880, C6882, C6884, C6886	CCSRCH101J50
	C6888, C6889, C6892, C6895, C6896	CCSRCH101J50
	C6899-C6902, C6905, C6906, C6915	CCSRCH101J50
	C6917	CCSRCH101J50
	C6927, C6928	CCSRCH221J50
	C6921, C6922	CEHVKW101M6R3
	C6911	CEHVKW220M6R3
	C6913	CKSRYB104K16
	C6920	CKSRYB473K16
	C6831, C6848, C6856, C6857, C6881	CKSSYF104Z16
	C6883, C6885, C6887, C6890, C6891	CKSSYF104Z16
	C6893, C6894, C6897, C6898	CKSSYF104Z16
	C6903, C6904, C6907-C6910, C6912	CKSSYF104Z16
	C6916, C6923-C6926	CKSSYF104Z16
	C6854, C6855	DCH1165
RESISTORS		
	R6826, R6881-R6883, R6885, R6892	RAB4CQ101J
	R6896, R6901, R6904	RAB4CQ101J
	R6834-R6836, R6839, R6937, R6938	RAB4CQ103J
	R6889	RS1/16S3900F
	R6915	RS1/16S3901F
	Other Resistors	RS1/16S###J
OTHERS		
	JA6881 HDMI CONNECTOR	AKP1232
[ROZ BLOCK]		
SEMICONDUCTORS		
	IC6951	PD6435A
	Q6951	RN1303
CAPACITORS		
	C6959, C6960	CCSRCH150J50
	C6951	CEHVKW101M6R3
	C6952-C6954, C6956-C6958	CKSSYF104Z16
	C6961, C6962, C6964-C6968	CKSSYF104Z16
RESISTORS		
	R6951-R6953, R6956-R6962, R6966	RAB4CQ100J
	R6968, R6972	RAB4CQ100J
	R6982-R6986, R6992	RAB4CQ101J
	R6945, R6946, R6988	RAB4CQ103J
	Other Resistors	RS1/16S###J
OTHERS		
	CN6951 50P CONNECTER	AKM1201
	X6951 CERAMIC RESONATOR	ASS1169
[CELIA BLOCK]		
SEMICONDUCTORS		
	IC7001, IC7002	HY57V643220CT-7
	IC7004	PE5362A
	IC7003	TC74LCX125FT
COILS AND FILTERS		
	F7001, F7002	CCG1162
CAPACITORS		
	C7031	ACG7046
	C7029, C7041	ACH1365
	C7064	CCSRCH100D50
	C7025, C7066, C7067	CCSRCH221J50
	C7001-C7024, C7026-C7028	CKSSYF104Z16
	C7032-C7040, C7042-C7063, C7068	CKSSYF104Z16
RESISTORS		
	R7013-R7018, R7030	RAB4CQ220J
	Other Resistors	RS1/16S###J
OTHERS		
	X7001 CRYSTAL OSCILLATOR	ASS1174
[MIKE BLOCK]		
SEMICONDUCTORS		
	IC7152	MBM29PL3200BE70PFV
	IC7101	PD5855A
COILS AND FILTERS		
	F7101, F7102	CCG1162
CAPACITORS		
	C7103, C7120	ACH1365
	C7137	CCSRCH470J50
	C7101, C7102, C7104-C7119	CKSSYF104Z16
	C7121-C7135, C7152, C7158-C7162	CKSSYF104Z16

Mark No.	Description	Part No.
	RESISTORS	
	R7113, R7115, R7116, R7119, R7121	RAB4CQ101J
	R7123, R7124	RAB4CQ101J
A	R7102, R7105-R7108, R7110, R7111	RAB4CQ330J
	Other Resistors	RS1/16S###J
	[MAIN UCOM BLOCK]	
	SEMICONDUCTORS	
	IC7205	BR24L64F-W
	IC7207	MB91F355APMTGE1
	IC7201	MM1522XU
	IC7209	NJM12904V
	IC7211	PQ20WZ11
B	IC7210	PST3612UR
	IC7203, IC7206	PST3628UR
	IC7202, IC7204	TC74VHC125FT
	Q7203	2SA1586
	Q7201	2SJ461A
	Q7202	HN1C01FU
	Q7206, Q7207	RN1902
	D7205	1SS301
	D7201, D7202	1SS355
	D7203	SML-311UT
	D7204	UDZS2R7(B)
C	**CAPACITORS**	
	C7244	CCSRCH100D50
	C7231	CCSRCH102J50
	C7243, C7245	CCSRCH221J50
	C7202, C7203, C7241, C7242	CCSRCH470J50
	C7248, C7249, C7258, C7259	CCSRCH470J50
	C7213, C7218	CCSRCH7R0D50
	C7205	CEHVKW101M6R3
	C7201, C7217, C7236, C7239, C7252	CKSRYB103K50
	C7226, C7237	CKSRYB104K16
	C7216	CKSRYB472K50
D	C7209-C7212, C7214, C7215	CKSSYF104Z16
	C7219-C7225, C7227-C7229	CKSSYF104Z16
	C7232-C7234, C7238, C7240	CKSSYF104Z16
	C7262, C7263	CKSSYF104Z16
	C7246, C7247, C7253	DCH1165
	RESISTORS	
	R7221, R7229, R7241, R7248-R7250	RAB4CQ101J
	R7201	RAB4CQ472J
	R7278	RS1/16S2201F
	R7279	RS1/16S4700F
	R7280	RS1/16S7500F
E	R7277	RS1/16S8201F
	Other Resistors	RS1/16S###J
	OTHERS	
	CN7203 3P CONNECTER	AKM1213
	CN7201 PLUG 8-P	AKM1225
	CN7202 4P CONNECTOR	AKM1275
	X7201 CERAMIC RESONATOR	ASS1170
F	**[IF BLOCK]**	
	SEMICONDUCTORS	
	IC7453	BA33BC0WFP
	IC7454	BA50BC0WFP
	IC7405	BR24L02FJ-W
	IC7456	NCP1117DT15
	IC7401	SII170BCLG64
	IC7404	TC74VCX08FT
	IC7403	TC74VCX574FT
	IC7451	TC74VHC08FT
	IC7452	TC74VHC126FT
	IC7402	TC74VHC541FTS1
	Q7406	2SA1586
	Q7405	HN1C01FU
	Q7403, Q7408	RN1303
	Q7451	RN1901
	Q7401	RN1902
	Q7402	RN2303
	D7402-D7407, D7457-D7459	1SS355
	COILS AND FILTERS	
	F7405-F7408	ATF1209
	L7401	ATH1162
	F7401-F7404	CCG1162
	CAPACITORS	
	C7416, C7421, C7424, C7484	ACG7046
	C7474	ACH1365
	C7401, C7402	CCSRCH100D50
	C7425	CCSRCH101J50
	C7475, C7477-C7482	CCSRCH221J50
	C7485, C7486	CCSRCH470J50
	C7408, C7409	CCSRCH471J50
	C7403, C7404, C7406, C7407	CCSRCH820J50
	C7410, C7411, C7413, C7414, C7419	CCSRCH820J50
	C7456, C7460, C7465	CEHVKW101M6R3
	C7405, C7412, C7415, C7417, C7418	CKSSYF104Z16
	C7420, C7423, C7426, C7427	CKSSYF104Z16
	C7451, C7452, C7454, C7455	CKSSYF104Z16
	C7458, C7459, C7466, C7469, C7471	CKSSYF104Z16
	C7473, C7476	CKSSYF104Z16
	C7453, C7457	DCH1165
	RESISTORS	
	R7449, R7451, R7452, R7454, R7477	RAB4CQ101J
	R7481, R7497-R7499	RAB4CQ101J
	R7453	RAB4CQ103J
	R7410	RS1/16S5100F
	R7456	RS1LMF1R5J
	R7455	RS2LMF4R7J
	Other Resistors	RS1/16S###J
	OTHERS	
	CN7454, CN7455 50P CONNECTER	AKM1201
	CN7453 PLUG 15-P	AKM1232
	CN7401 15P CONNECTOR	AKM1239
	CN7451 15P CONNECTOR	AKM1301
	7403 SCREW TERMINAL	VNE1949

AUDIO AMP ASSY

	SEMICONDUCTORS	
	IC3502	BD3869AS
	IC3504	LA4625
	IC3501	NJM2195L

Mark No.	Description	Part No.
	IC3503	NJM7809FA
	Q3501, Q3502, Q3507, Q3510, Q3511	2SA1162
	Q3503, Q3504, Q3508	2SC2712
	Q3512	DTC124EK
	D3501-D3504	1SS355
	CAPACITORS	
	C3525	CCSRCH221J50
	C3501-C3504, C3520, C3528-C3532	CEAT100M50
	C3505, C3526, C3549, C3557, C3564	CEAT101M16
	C3519	CEAT1R0M50
	C3536	CEAT220M50
	C3537, C3538	CEAT2R2M50
	C3551, C3552	CEAT330M25
	C3566	CEHAT101M10
	C3561	CEHAT101M16
	C3562, C3565	CEHAT220M50
	C3559, C3560	CEHAT2R2M50
	C3509	CEHAT331M16
	C3507	CEHAT471M25
	C3571	CEHAT472M25
	C3563	CEHATR47M50
	C3512, C3522, C3572	CFTLA103J50
	C3511, C3513-C3518, C3533, C3534	CFTLA104J50
	C3545-C3548, C3573-C3576	CFTLA104J50
	C3521	CFTLA333J50
	C3524	CFTLA334J50
	C3523	CFTLA474J50
	C3506, C3508, C3510, C3527, C3535	CKSRYB103K50
	C3550, C3558	CKSRYB103K50
	C3543, C3544	CQMA222J50
	RESISTORS	
	R3599-R3602	RD1/2MMF2R2J
	Other Resistors	RS1/16S###J
	OTHERS	
	J3750 6P HOUSING WIRE	ADX3109
	CN3504 3P CONNECTOR	B3P-VH
	CN3502 PLUG(6P)	KM200NA6
	3512-3515 SCREW	VBB30P100FNI
	KN3501, KN3502 WRAPPING TERMINAL	VNF1084

SP TERMINAL AASY

Mark No.	Description	Part No.
	COILS AND FILTERS	
⚠	L3701, L3702	ATF1206
	CAPACITORS	
⚠	C3701-C3704	CCSRCH101J50
	C3713-C3716	CCSRCH221J50
	C3709, C3710	CKSRYB332K50
	C3711, C3712	CKSRYF473Z50
	RESISTORS	
	R3701-R3704	RD1/2MMF100J
	OTHERS	
	CN3701 SPEAKER TERMINAL	AKE1060
⚠	3701 SPEAKER SHIELD A	ANK1710
⚠	3702 SPEAKER SHIELD B	ANK1711
	CN3702 PLUG(6P)	KM200NA6

AV BOARD ASSY

Mark No.	Description	Part No.
	TV TUNER UNIT	AXF1130
	TV TUNER PACK	AXF1132
	DD CON UNIT	AXY1088
	DD CON UNIT	AXY1089
	DD CON UNIT	AXY1121
	[TUNER BLOCK]	
	SEMICONDUCTORS	
	IC7503	CXA2064M
	IC7502	TC74HC4066AFT
	Q7503, Q7512, Q7520, Q7521	2SA1586
	Q7501, Q7502, Q7504, Q7506	2SC4116
	Q7508-Q7511, Q7519	2SC4116
	Q7515	DTA124EUA
	Q7505, Q7513, Q7516, Q7517	HN1B04FU
	D7502	1SS355
	D7501	UDZS30(B)
	COILS AND FILTERS	
	F7501-F7504	VTF1080
	CAPACITORS	
	C7527, C7529, C7533, C7535, C7536	ACG1122
	C7550	ACG1122
	C7518, C7553	ACG7046
	C7548	ACH1394
	C7530	ACH1417
	C7528	ACH1418
	C7501	CEHVKW100M50
	C7508, C7509, C7544, C7545	CEHVKW101M6R3
	C7502, C7520, C7524	CKSRYB102K50
	C7516	CKSRYB103K50
	C7531, C7537	CKSRYB105K10
	C7552	CKSRYB123K50
	C7532	CKSRYB272K50
	C7523, C7554	CKSRYB332K50
	C7526	CKSRYB473K16
	C7538	CKSRYB562K50
	C7510, C7519, C7539, C7549	CKSRYF104Z50
	C7534, C7551, C7557, C7558	DCH1165
	RESISTORS	
	R7502	ACN1199
	R7545, R7546	RS1/16S1002F
	R7559	RS1/16S6802F
	VR7505	CCP1388
	VR7503	CCP1394
	VR7502, VR7504, VR7506	CCP1396
	Other Resistors	RS1/16S###J
	[AV IO BLOCK]	
	SEMICONDUCTORS	
	IC7801	MAX3232CPW
	IC7803	TC74VHC00FT
	IC7802	TC74VHC125FT
	Q7705, Q7706, Q7716, Q7804	2SA1586
	Q7708, Q7709, Q7805	2SC4116
	Q7702, Q7703	2SC5233
	Q7701, Q7718	DTA124EUA
	Q7704, Q7803, Q7806	DTC124EUA
	Q7707	HN1A01FU
	D7701	1SS301

Mark No.	Description	Part No.
	D7702, D7705-D7707, D7710-D7712	1SS302
	D7708, D7807-D7809	1SS355
	D7713-D7718	UDZS9R1(B)
	CAPACITORS	
	C7718, C7747	ACH1419
	C7806, C7809	CEHVKW100M16
	C7702, C7707, C7709, C7711, C7739	CKSRYB103K50
	C7741, C7744-C7746	CKSRYB103K50
	C7701, C7703-C7705, C7715-C7717	CKSRYB105K10
	C7723, C7724, C7740, C7752-C7754	CKSRYB105K10
	C7706, C7743	CKSRYB473K16
	C7801-C7805, C7807, C7808	CKSRYF104Z50
	C7708, C7710, C7712, C7714	DCH1165
	C7719, C7720, C7737, C7738, C7742	DCH1165
	C7749-C7751	DCH1165
	RESISTORS	
	R7711, R7719	RS1/10S151J
	R7703, R7704, R7727, R7757, R7758	RS1/16S75R0F
	R7761-R7763, R7766, R7769-R7771	RS1/16S75R0F
	Other Resistors	RS1/16S###J
	OTHERS	
	JA7704 6P PIN JACK	AKB1295
	JA7701 6P PIN JACK	AKB1297
	JA7702 4P PIN JACK	AKB1313
	JA7703 PINJACK+MINI DIN 4P	AKB1314
	JA7705 4P MINIDIN SOCKET(S)	AKP1236
	JA7801 9P D-SUB SOCKET	AKP1240
	[AV SW BLOCK]	
	SEMICONDUCTORS	
	IC8005	AN15852A
	IC8002	CXA2069Q
	IC8004	NJM12904V
	IC8003	TC4052BFT
	Q8005, Q8006, Q8013, Q8014	2SA1586
	Q8001, Q8002, Q8007-Q8010, Q8012	2SC4116
	Q8016, Q8019, Q8020	2SC4116
	Q8015	2SK209
	Q8003, Q8018	DTA124EUA
	Q8004, Q8017	DTC124EUA
	Q8011	HN1C01FU
	D8001, D8002	1SS301
	CAPACITORS	
	C8012, C8056	ACH1394
	C8022, C8027	CCSRCH181J50
	C8019, C8038	CCSRCH681J50
	C8040, C8041	CEHVKW100M16
	C8002-C8004, C8008, C8009, C8016	CKSRYB105K10
	C8001, C8005-C8007, C8010, C8013	CKSRYF104Z50
	C8015, C8025, C8026, C8031-C8036	CKSRYF104Z50
	C8039, C8042-C8044, C8048	CKSRYF104Z50
	C8052, C8053, C8055, C8059	CKSRYF104Z50
	C8063-C8073	CKSRYF104Z50
	C8011, C8014, C8017, C8018	DCH1165
	C8023, C8024, C8028, C8037	DCH1165
	C8045, C8046, C8061	DCH1165

Mark No.	Description	Part No.
	RESISTORS	
	Other Resistors	RS1/16S###J
	[AV REG BLOCK]	
	SEMICONDUCTORS	
	IC8505	BA50BC0WFP
	IC8504	BA90BC0WFP
	IC8506	BD6522F
	IC8503	M5291FP
	IC8502	NCP1117ST33
	IC8501	NJM12904V
	IC8507	PQ20WZ11
	Q8501, Q8502, Q8504	2SC4116
	Q8503	DTA124EUA
	Q8511	TPC6104
	D8503, D8505, D8506, D8508, D8512	1SS355
	D8509	D1FL20U(S)
	D8504	UDZS2R7(B)
	D8502	UDZS30(B)
	D8501	UDZS5R6(B)
	COILS AND FILTERS	
	L8502	ATH1182
	F8502-F8506	CCG1162
	CAPACITORS	
	C8508, C8521, C8523, C8529, C8531	ACG7046
	C8533	ACG7046
	C8505, C8512	ACH1394
	C8520	ACH1403
	C8519	CCSRCH221J50
	C8546	CCSRCH470J50
	C8514	CCSRCH821J50
	C8500, C8540, C8542	CEHAZL471M16
	C8503, C8526, C8554	CEHVKW100M16
	C8501	CEHVKW100M35
	C8507, C8527, C8539	CEHVKW100M50
	C8517	CEHVKW101M6R3
	C8506, C8510, C8515, C8522, C8552	CEHVKW220M16
	C8502, C8504, C8511, C8513, C8516	CKSRYB103K50
	C8518, C8524, C8525, C8551, C8553	CKSRYB103K50
	C8535	CKSRYF104Z50
	C8509, C8541, C8543-C8545	DCH1165
	RESISTORS	
	R8511	ACN1164
	R8506, R8507, R8513, R8514	ACN1188
	R8543, R8544, R8547, R8548	ACN1188
	R8502, R8531	ACN1199
	R8503	RD1/2LMF100J
	R8501	RD1/2LMF391J
	R8512	RS1/16S1101F
	R8549	RS1/16S2201F
	R8523	RS1/16S3302F
	R8542	RS1/16S4700F
	R8550	RS1/16S7500F
	R8546	RS1/16S8201F
	R8508	RS1LMF8R2J
	R8536	RS1LMFR56J
	R8524	RS2LMF3R3J
	Other Resistors	RS1/16S###J

Mark No.	Description	Part No.
	OTHERS	
	CN8504 PLUG(15P)	KM200NA15
	[BOARD IF BLOCK]	
	SEMICONDUCTORS	
	Q8661	RN1901
	Q8662, Q8663	RN2902
	CAPACITORS	
	C8661, C8662	CCSRCH101J50
	C8651, C8652	CCSRCH181J50
	C8664	CEHVKW101M6R3
	C8663	CKSRYF104Z50
	RESISTORS	
	Other Resistors	RS1/16S###J
	OTHERS	
	CN8651, CN8652 50P CONNECTOR	AKM1201
	CN8654 4P CONNECTOR	AKM1290
	CN8656 11P CONNECTOR	AKM1297
	CN8657 40P CONNECTER	AKM1303
	[UIF UCOM BLOCK]	
	SEMICONDUCTORS	
	IC8705	BR24L01AFJ-W
	IC8702	HD64F3687FP
	IC8703	PST9231N
	IC8701	TC74VHC08FT
	IC8704	TC7W126FU
	Q8702	DTC124EUA
	CAPACITORS	
	C8706, C8707	CCSRCH120J50
	C8714, C8715	CCSRCH470J50
	C8716	CEHVKW101M6R3
	C8709	CKSRYB472K50
	C8701-C8703, C8705, C8708	CKSRYF104Z50
	C8711-C8713	CKSRYF104Z50
	RESISTORS	
	R8719	RAB4C101J
	R8702, R8704, R8720, R8745	RAB4C103J
	Other Resistors	RS1/16S###J
	OTHERS	
	CN8701 PLUG 8-P	AKM1225
	X8702 CERAMIC RESONATOR	ASS1168
	X8701 CRYSTAL OSCILLATOR	ASS1172
	[CCD BLOCK]	
	SEMICONDUCTORS	
	IC8904	FMS6410CS
	IC8903	PD5910A
	IC8906	PST3628UR
	Q8902-Q8904, Q8923, Q8924	2SA1586
	CAPACITORS	
	C8913, C8916	ACG1109
	C8912, C8915	CCSRCH221J50
	C8920, C8921	CCSRCH5R0C50
	C8904, C8907	CCSRCH681J50
	C8944	CCSRCK2R0C50

Mark No.	Description	Part No.
	C8910, C8919	CEHVKW100M16
	C8911, C8914, C8931	CKSRYB102K50
	C8930	CKSRYB103K50
	C8935, C8936	CKSRYB105K10
	C8945	CKSRYB153K50
	C8929	CKSRYB683K16
	C8901, C8903, C8906, C8909	CKSRYF104Z50
	C8917, C8918, C8925, C8937	CKSRYF104Z50
	RESISTORS	
	R8932	RAB4C101J
	R8907-R8916, R8918, R8923, R8930	RAB4C473J
	R8948, R8949, R8951	RAB4C473J
	Other Resistors	RS1/16S###J
	OTHERS	
	X8901 160MHz	ASS1159
	SR ASSY	
	CAPACITORS	
	C9509, C9511	CKSRYB105K10
	RESISTORS	
	Other Resistors	RS1/16S###J
	OTHERS	
	CN9505, CN9506	AKM1274
	CN9504 4P CONNECTOR	AKM1275
	CN9502 10P CONNECTOR	AKM1296
	JA9502 MINI JACK(4P)	AKN1073
	JA9501 2P JACK	DKB1031
	9503 SCREW TERMINAL	VNE1949
	LED ASSY	
	SEMICONDUCTORS	
	D9462	SML-311UT
	D9461	SML-521MDW
	COILS AND FILTERS	
	F9461, F9463-F9465	QTL1011
	AC SEPA ASSY	
	OTHERS	
	CN9471-CN9473 2P CONNECTOR	B2P3-VH
	KEY ASSY	
	SWITCHES AND RELAYS	
	S5701-S5706	CSG1155
	OTHERS	
	CN5701 6P FFC CONNECTOR	AKM1208

6. ADJUSTMENT

1. At shipment, the unit is adjusted to its best conditions. Normally, it is not necessary to readjust even if an assembly is replaced. If the adjustment is shifted or if it becomes necessary to readjust because of part replacement, etc., perform the adjustment as described below.
2. Any value changed in Service/Factory mode will be stored in memory as soon as it is changed. Before readjustment, take note of the original values for reference in case you need to restore the original settings.
3. Use a stable AC power supply.

6.1 POSSIBLE CASES WHERE READJUSTMENT IS REQUIRED

■ When any of the following assemblies is replaced

AV BOARD Assy	No adjustment required
MAIN BOARD Assy	No adjustment required
TUNER Board Assy	No adjustment required However, HOST ID is changed. Please tell a customer about new HOST ID. Refer to the following note and instruction manual.
PANEL POWER SUPPLY Unit	No adjustment required
MR POWER SUPPLY Unit	No adjustment required
DIGITAL VIDEO Assy	Writing of backup data is required. Refer to the "7.1.6 BACKUP WHEN THE MAIN UNIT IS ADJUSTED. "
43 (50) X DRIVE Assy	No adjustment required
43 (50) Y DRIVE Assy	No adjustment required
Service Panel	Refer to the "6.9 METHOD FOR REPLACING THE SERVICE PANEL ASSY. "
Other assemblies	No adjustment required

■ When any part in the following assemblies is replaced

MR POWER SUPPLY Unit	The assembly must be replaced as a unit, and no part replacement is allowed.
AV BOARD Assy	If the front end (U7501, U7502) is replaced, adjustment is required.
MAIN BOARD Assy	The assembly must be replaced as a unit, and no part replacement is allowed.
TUNER Board Assy	The assembly must be replaced as a unit, and no part replacement is allowed.
PANEL POWER SUPPLY Unit	The assembly must be replaced as a unit, and no part replacement is allowed.
DIGITAL VIDEO Assy	No adjustment required
43(50) X DRIVE Assy (IC1101, IC1102)	Refer to the "6.2 DRIVE ASSY ADJUSTMENT."
43(50) Y DRIVE Assy (IC2201, IC2202)	Refer to the "6.2 DRIVE ASSY ADJUSTMENT."
Other assemblies	No adjustment required

■ Adjustment items

① Audio Level Adjustment
② Video Level Adjustment
③ Audio Level Adjustment
④ MSP Adjustment
⑤ MSP Adjustment

NOTE : Checking the Cable Card ID

The Plasma Display System has a slot for a cable card that is used for managing your information by the cable TV company. The following procedure allows you to check your Cable Card ID and the Host ID.

1 Press HOME MENU.
2 Select “Tuner Setup”. (↑/↓ then ENTER)
3 Select “Channel Setup”. (←/→ then ENTER)
4 Select “POD ID”. (↑/↓)
  • The Host ID and Cable Card ID appear.
5 Press HOME MENU to exit the menu.

6.2 DRIVE ASSY ADJUSTMENT

■ How to readjust the timing of the control signals when the DRIVE Assy TND506MD is to be replaced

As there is a large difference in delay time among the individual TND506MDs, timing adjustment has been made on each TND506MD in the unit process. If the TND506MD is replaced on the X or Y Drive Assy, readjustment of the timing of the control signals is required.

Assy	Replaced IC	Signal for which Readjustment is Required
X DRIVE	IC1101	XSUS-U2 & XSUS-D2
	IC1102	XSUS-U1 & XSUS-D1
Y DRIVE	IC2201	YSUS-U1 & YSUS-D1
	IC2202	YSUS-U2 & YSUS-D2

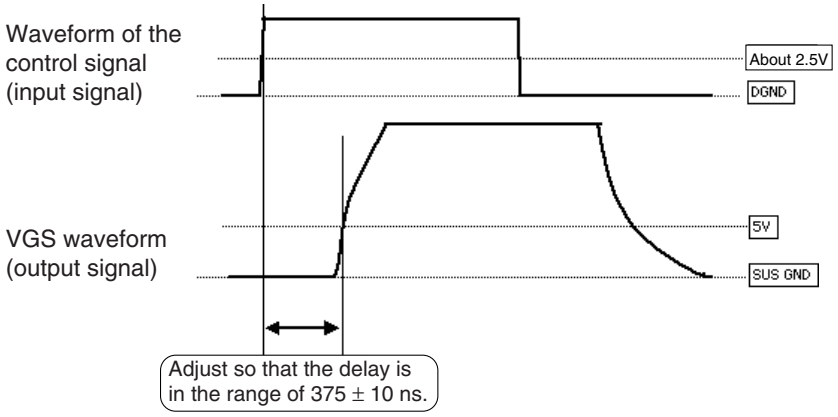
• How to adjust

Adjust the timing between the startup of the control signals of SUS-U1, SUS-D1, SUS-U2, and SUS-D2 and the startup of the voltage between the gate and the source of the output FET, with the VR resistors that are inserted in the signal line in series. When adjusting, set the unit to Drive OFF mode, and Vsus to 0 V. (For details on how to set to Drive OFF mode, see "7.1.5 Power on/off function for the large-signal system".)

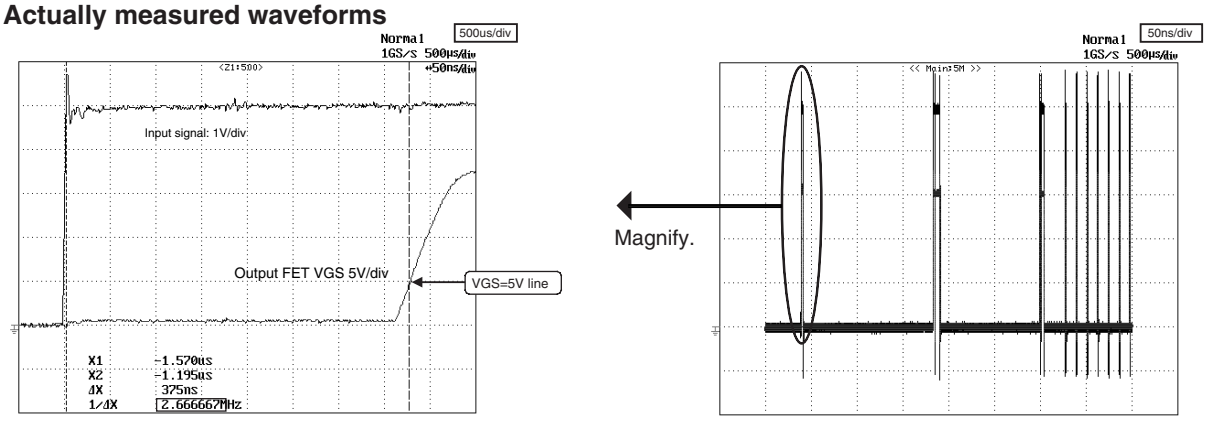
• Specified values for adjustment and adjustment points

		X DRIVE			Y DRIVE		
Signal Name	Set Value for Delay Time	Input Signal	Output Signal	Adjustment VR	Input Signal	Output Signal	Adjustment VR
SUS-U1	375ns ± 10ns	K1005	Q1108	VR1103	K2025	Q2202	VR2201
SUS-D1	375ns ± 10ns	K1009	Q1112	VR1104	K2027	Q2205	VR2202
SUS-U2	375ns ± 10ns	K1008	Q1103	VR1101	K2022	Q2208	VR2203
SUS-D2	375ns ± 10ns	K1006	Q1105	VR1102	K2024	Q2212	VR2204

Note: Connect GND of the probe with DGND (DGND: X Drive Assy: K1020, Y Drive Assy: K2010) for input signal.
For outputting a signal, obtain a signal from the FET gate terminal.
For adjustment, magnify any pulse in the waveform.


Waveform of the control signal (input signal)
About 2.5V
DGND
VGS waveform (output signal)
5V
SUS GND
Adjust so that the delay is in the range of 375 ± 10 ns.

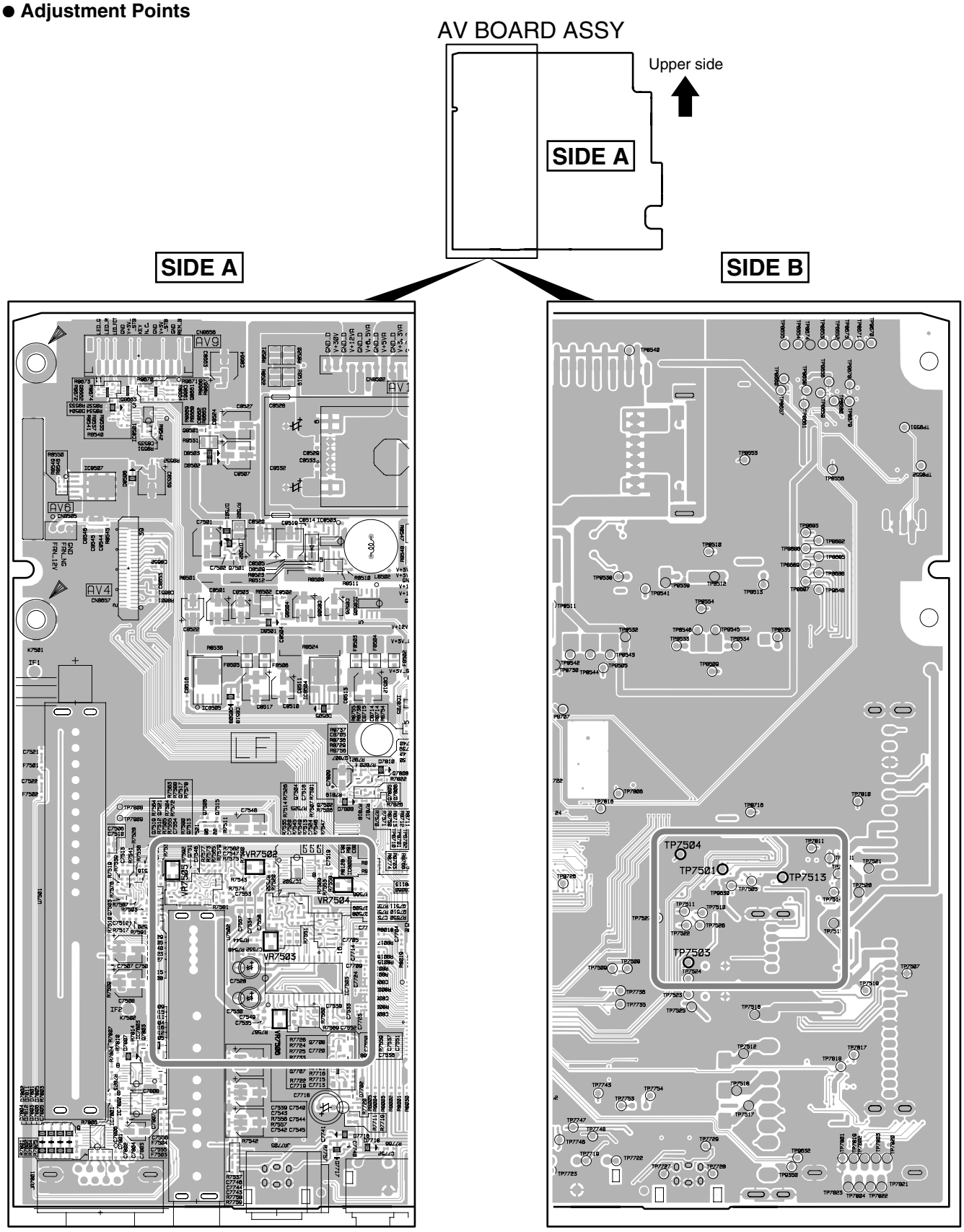
• Actually measured waveforms



6.3 ADJUSTMENT ITEMS

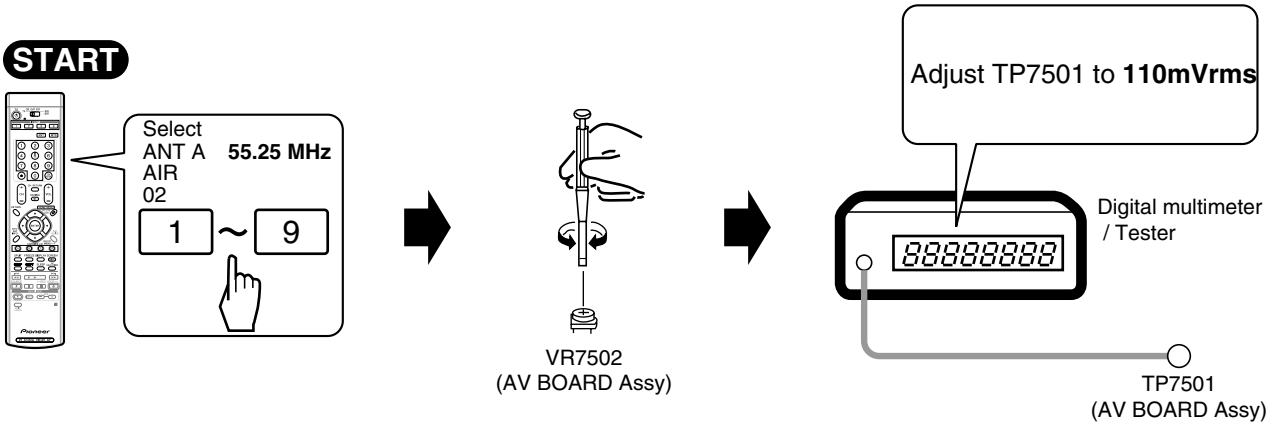
If readjustment is necessary because of adjustment error at shipment, perform adjustments as shown below.

● **Adjustment Points**



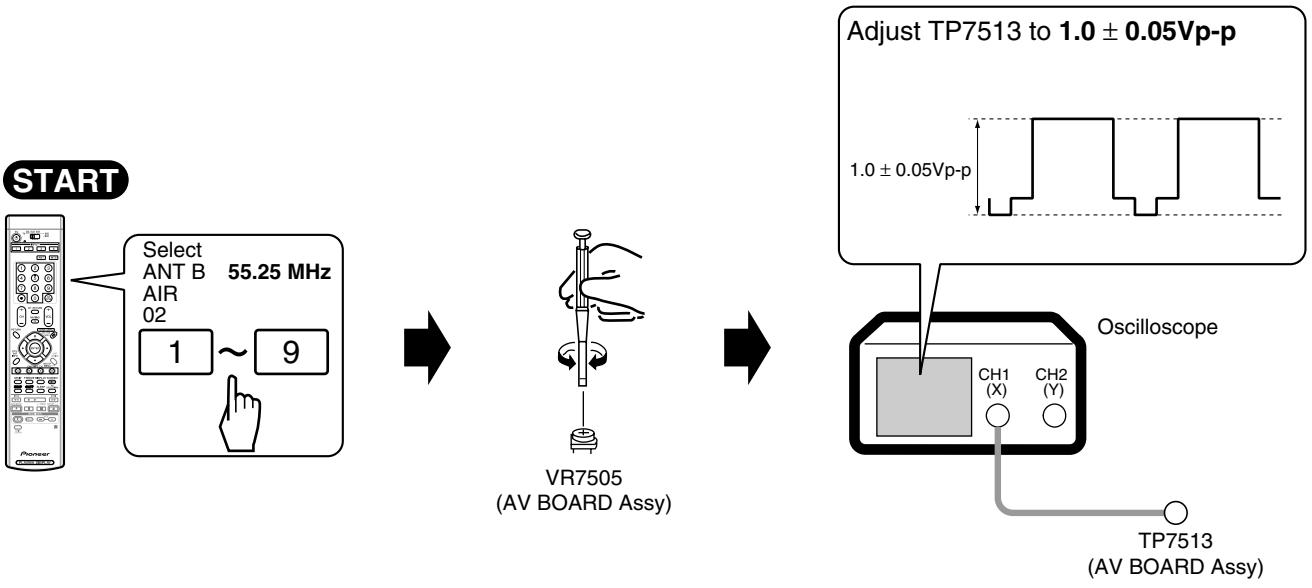
① Audio Level Adjustment

Equipment : SG, Digital mutimeter / Tester
Condition : Input RF level 60dBμV
1kHz MONO 100%



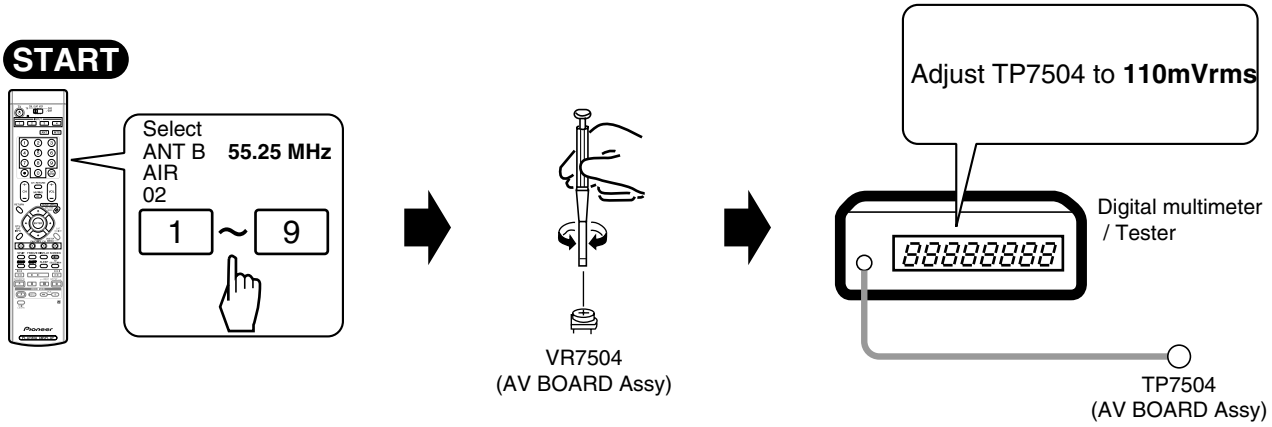
② Video Level Adjustment

Equipment : SG, Oscilloscope
Condition : Input RF level 60dBμV
Modulation 87.5%
White bar 100%



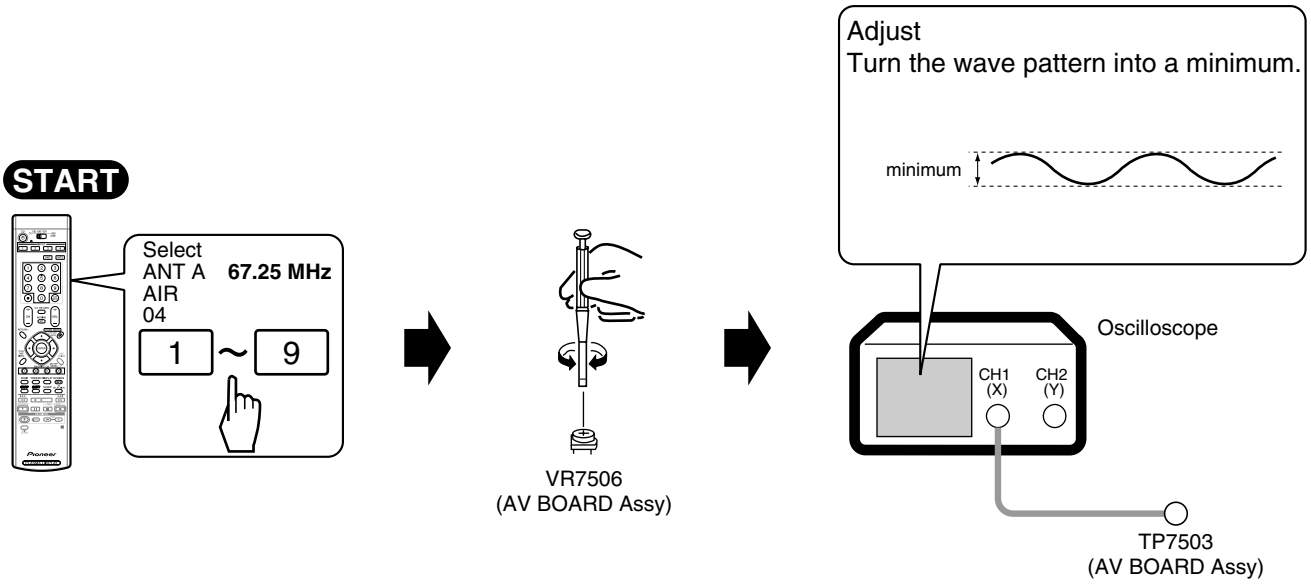
③ Audio Level Adjustment

Equipment : SG, Digital mutimeter / Tester
Condition : Input RF level 60dBμV
1kHz MONO 100%



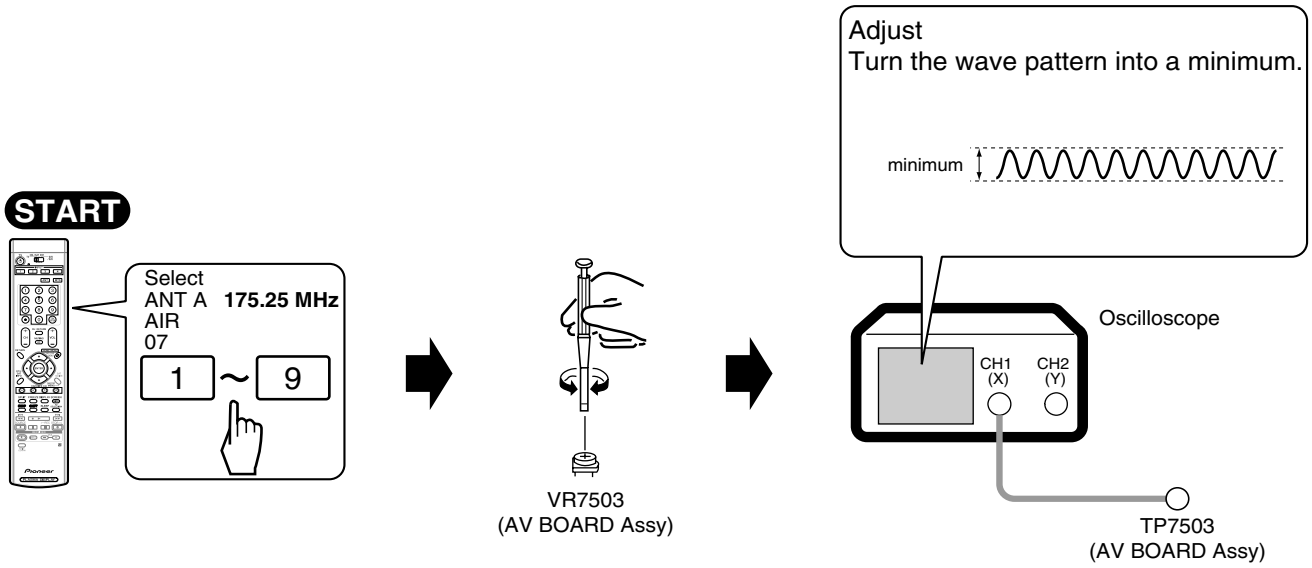
④ MSP Adjustment

Equipment : SG, Oscilloscope
Condition : Input RF level 60dBμV
300Hz STEREO 100% Lch Only



5 MSP Adjustment

Equipment : SG, Oscilloscope
Condition : Input RF level 60dBμV
5kHz STEREO 100% Lch Only

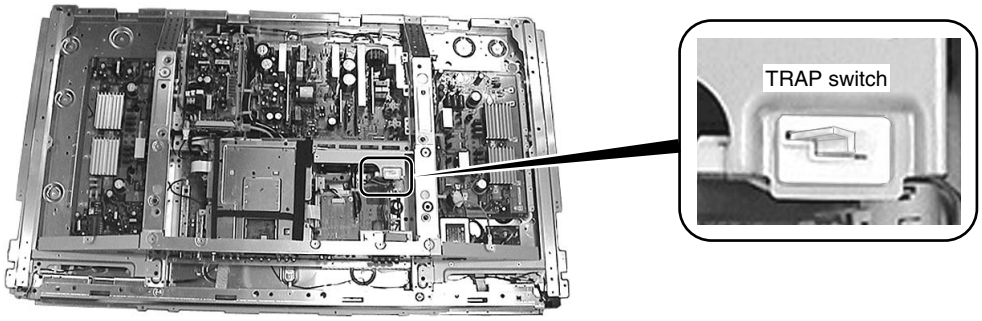


6.4 TRAP SWITCH

● Outline and Notes

For video data transmission, digital signals are used. Therefore, this unit adopts the HDCP (High-bandwidth Digital Content Protection) system for copyright protection. This unit is also provided with a detection switch (TRAP switch) that will prohibit the unit from being turned on again "if the upper plate of the unit is accidentally opened," in order to prevent the panel technology from being leaked out.

The TRAP switch is disabled while the unit is turned off.
When performing internal diagnosis of the PDP, fix the switch to the OFF position using adhesive tape before turning on the unit. After servicing, be sure to remove the adhesive tape.



6.5 SERVICE FACTORY MODE

To operate in Service Factory mode, use the supplied remote control unit.

How to enter Service Factory Mode

Please refer to the technical documentation (Service Know-How).
(Same as G5 PDP system)

Operation in Service Factory mode

● Functions whose settings are set to OFF

The settings for the following functions are set to OFF when Service Factory mode is entered (including when the "FAY" command is received):

- Two-screen operations (input function set on the main side is selected)
- Detection of the TRAP switch (The log in the EEPROM is retained.)

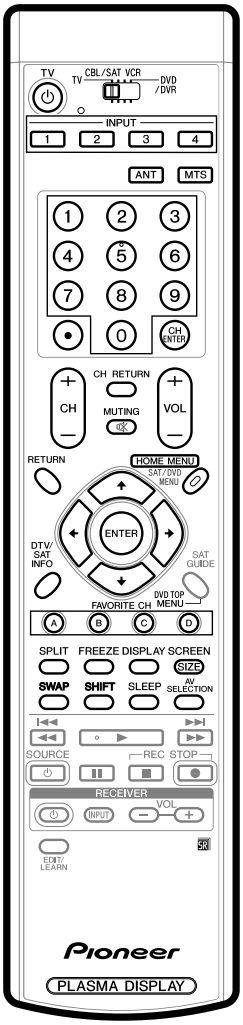
● User data

User data will be treated as follows:

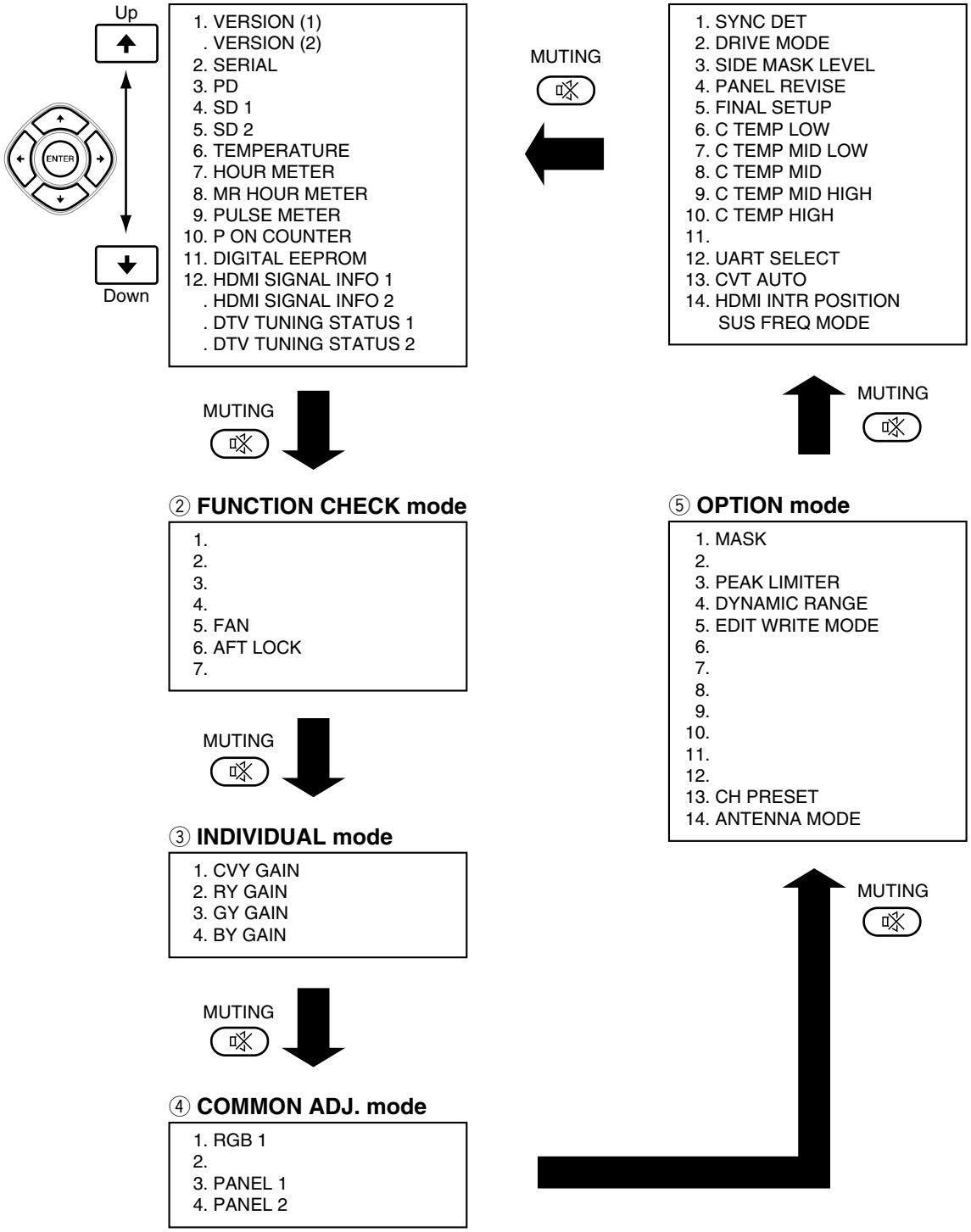
- User data on picture- and audio-quality adjustments are not reflected (data stored in memory will be retained).
- Data on screen position are reset to the default values (data stored in memory will be retained).

Remote control codes in Service Factory mode

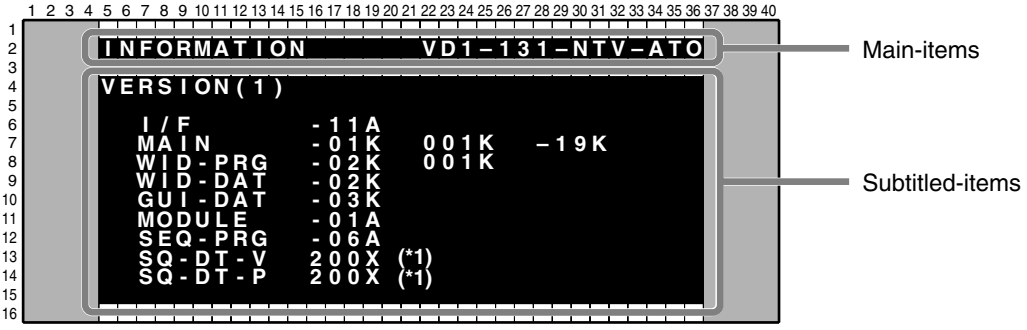
SR Function	Main Function	Remarks
Muting	Switching the main items	Shifting to the next main item
DOWN	Switching the subtitled items	Shifting downward to the next subtitled item
UP	Switching the subtitled items	Shifting upward to the next upper layer
LEFT	Increasing the adjustment value	Increasing the adjustment value
RIGHT	Decreasing the adjustment value	Decreasing the adjustment value
ENTER	Switching layers	Shifting downward or upward to the next lower or upper layer
INPUT	Selecting input	Shifting the input to the next function
INPUTxx	Selecting input	Switching the input to xx
CH+	Increasing the channel number	Advancing a preset channel (effective when Function is set to TV)
CH-	Decreasing the channel number	Turning a preset channel backward (effective when Function is set to TV)
Numeric keys	Function: TV	Function: TV (previously selected channel number is selected)
TV ⏻	Power OFF	Turning the power off
FACTORY	Factory OFF	Turning Service Factory mode off
HOME MENU	Menu ON	Turning Service Factory mode off



Changes of the Service Factory menus



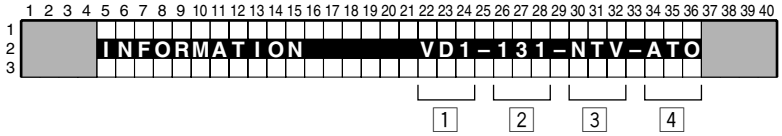
Indications in Service Factory mode



(*1) 200X: PDP-4350SX, 210W: PDP-5050SX

Main-item indications

Four parameters are displayed:



1 Input function

Input Functions	On-Screen Display
INPUT1 to INPUT4	VD1 to VD4
Terrestrial wave A	ARA
Terrestrial wave B	ARB
CABLE A	CBA
CABLE B	CBB

2 SIG mode and screen size

Note: See SIG-Mode Tables. (See next page.)

3 Color system and signal type

Color System and Signal Type		On-Screen Display
NTSC	Composite input/ S-connector input	NTV
BLACK/WHITE		BWV
Y / CB / CR		CBR
Y / PB / PR		PBR
Digital video signal		DIG

4 Option (Destination, etc.)

Options	On-Screen Display
One body in North America(Regular)	ATO

● SIG-Mode Table

The signal mode is displayed in three characters:
First character: Resolution of the input signal (numerics for the video signals)
Second character: Grouping of the V frequencies

SIG-Mode table for video signals (resolutions and V frequencies)

SIG-Mode	Signal Type	Vertical Frequency fv (Hz)	Horizontal Frequency fh (kHz)
13*	SDTV • 525i	60.000	15.750
33*	SDTV • 525p	60.000	31.500
43*	HDTV • 1125i	60.000	33.750
63*	HDTV • 750p	60.000	45.000

2nd Character	Reference V Frequency	Remarks
–	–	No signal
1	50	
2	56	
3	60	
4	66	
5	70	
6	For interpolation of 72-Hz area	For distinguishing between 70-Hz or 75-Hz area
7	75	
8	85	
9 (spare)	–	
?	–	Out of range

Third character: Selection of the screen size by the user is displayed.
(○: available, ×: not available)

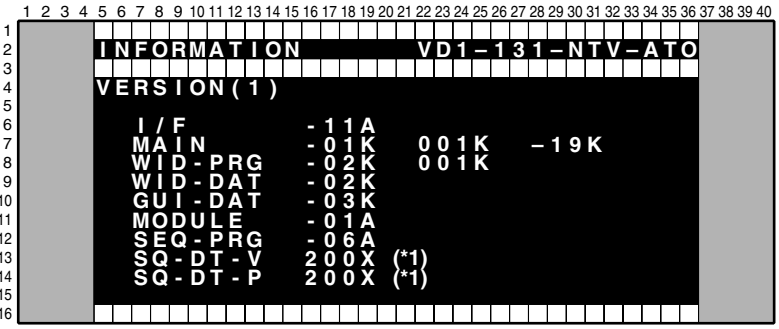
3rd Character	Description on GUI	Remarks
1	4 : 3	
2	FULL (FULL1)	
3	ZOOM	
4	CINEMA	
5	WIDE	Indude WIDE-HD
8	FULL2	HDTV1035i

① INFORMATION mode

● Operation items

No.	Function / Display	Content
1	VERSION (1)	The flash memory versions for each device are displayed. (common part)
2	VERSION (2)	The flash memory versions for each device are displayed. (individual part)
3	SERIAL	For displaying the serial number of the product (not used)
4	PD	Power-down generated on the panel side and its time of occurrence are displayed.
5	SD1	Shutdown generated on the panel side and its time of occurrence are displayed.
6	SD2	Power-down and/or shutdown generated on the MR side and their/its time of occurrence are displayed.
7	TEMPERATURE	Information on temperature is displayed.
8	HOUR METER	Cumulative power-on time to the panel is displayed.
9	MR HOUR METER	Cumulative power-on time to the MR side is displayed.
10	PULSE METER	The pulse meter value on the panel side is displayed.
11	P ON COUNTER	The number of times the power to the panel was turned on is displayed.
12	DIGITAL EEPROM	The status of the backup data for the module microcomputer is displayed.
13	HDMI SIGNAL INFO.	The file information of HDMI series are displayed.
14	DTV TUNING STATUS	Information of DTV Tuning Status are displayed.

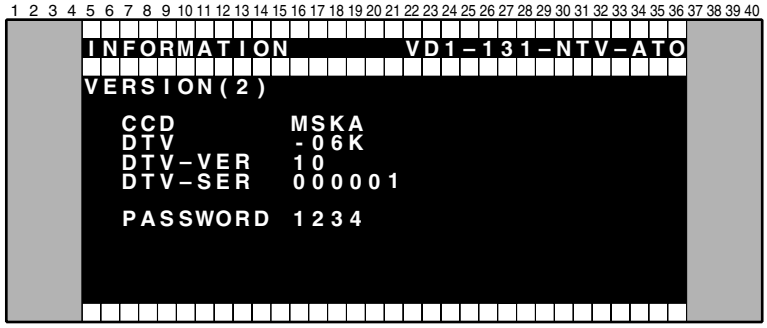
1. VERSION (1)



(*1) 200X: PDP-4350SX, 210W: PDP-5050SX

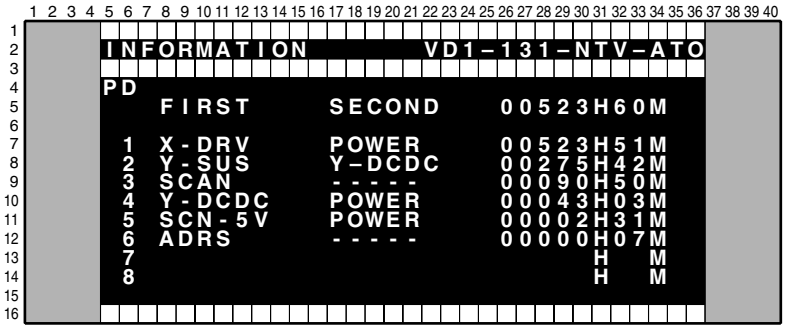
Flash memory of Device	On-Screen Display
User IF microcomputer (IC8702)	I / F
Main microcomputer (IC7207)	MAIN
Program for IC 3 (IC7101)	WID–PRG
Enhanced data for IC 3 (IC7101)	WID–DAT
GUI data for IC 3 (IC7101)	GUI–DAT
Module microcomputer (IC5201)	MODULE
Program for IC 4 (IC5401)	SEQ–PRG
Sequence data for IC 4 Video	SQ–DT-V
Sequence data for IC 4 PC	SQ–DT-P

2. VERSION (2)



Device	Name Display	Version Display	Remarks
CCD-UCOM	CCD	4 character	
DTV Software Version	DTV	4 character	
DTV hardware Version	DTV-VER	2 character	
DTV hardware Serial	DTV-SRL	6 character	
USER Password	PASSWORD	4 character	

4. PD

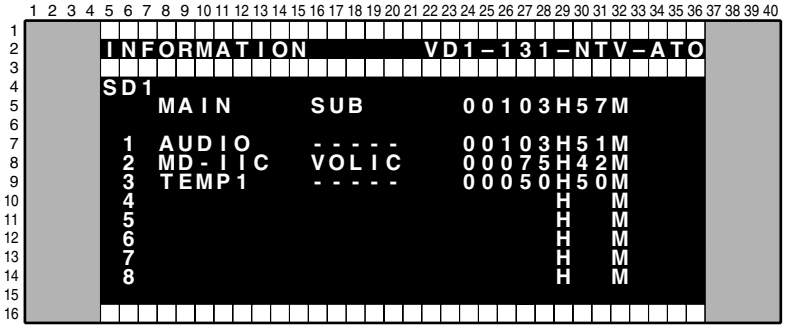


Power-down information only on the panel side is displayed.

• Power-down information

No.	Type of Power-down	On-Screen Display	No.	Type of Power-down	On-Screen Display
1	No corresponding item	-----	8	Power-down of the address system	ADRS
2	Power-down of the main power supply system	POWER	9	Power-down of the X-DRIVE circuitry	X-DRV
3	Power-down of the scanning system	SCAN	A	Power-down of the X-DC/DC converter	X-DCDC
4	Power-down in the path between the scanning system and 5-V power supply	SCN-5V	B	Power-down of the X-SUS system	X-SUS
5	Power-down of the Y-Drive system	Y-DRV	C	Power-down of the driving IC power supply system	D-DCDC
6	Power-down of the Y-DC/DC converter	Y-DCDC	D	Power-down of the driving stopped	IC4 (IC5401)
7	Power-down of the Y-SUS system	Y-SUS	F	Power-down point unidentified	UNKNOWN

5. SD1



The shutdown log only on the panel side is displayed.

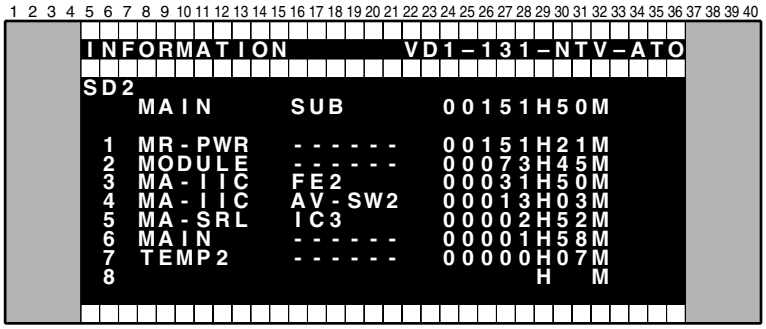
• Shutdown (1) information

No.	Type of Shutdown	On-Screen Display (MAIN)	Remarks
1	Abnormality in IC 4 communication	IC4	
2	Abnormality in module microcomputer IIC communication	MD-IIC	Subcategories exist. [EEPROM (4K) : IC5206, Backup EEPROM (2K) : IC7405, VOL IC : IC3502]
3	Abnormality in RST2	RST2	
4	Abnormality in panel temperature (TEMP1)	TEMP1	
5	Short-circuiting of the speakers	AUDIO	

• DATA on MD-IIC subcategories

OSD	Defective Communication Part
EROM4K	IC5201: Module microcomputer EEPROM
EROM2K	IC7405: EEPROM for backup
VOLIC	IC3502: VOLUME IC

6. SD2



Information on power-down and shutdown of the MR side is displayed.

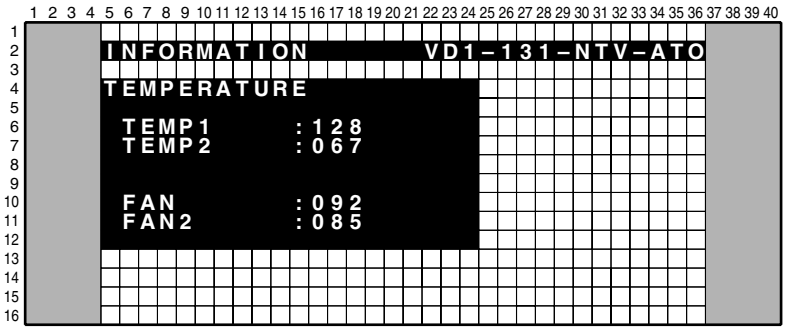
• SD2 information

No.	Type of Failure	On-Screen Display (MAIN)	Remarks
1	Abnormality in module microcomputer communication	MODULE	
2	Abnormality in 3-wire serial communication of the main microcomputer	MA-SRL	Subcategories exist.
3	Abnormality in main microcomputer IIC communication	MA-IIC	Subcategories exist.
		AV-EEP	Subcategories exist.
4	Abnormality in main microcomputer communication	MAIN	
5	Abnormality in temperature of the unit. (TEMP2)	TEMP2	
6	Fan stopped.	FAN	
7	Abnormality in communication of the digital tuner	UART	Subcategories exist.
8	Abnormality in the ASIC power supply on the MR side	M-DCDC	

• Subcategory information

Type of Shutdown	Subcategory	Remarks
MA-SRL	IF microcomputer (IC8702), IC2 (IC7004), IC3 (IC7101)	
MA-IIC	MA-EEP (IC7205), IC1-M (IC6107), IC1-S (IC6255), HDMI2 (IC6881), AD-M (IC6402), AD-S (IC6602), IC6 (IC6951), CCD (IC8903), FE1 (U7501), FE2 (U7502), AV-SW1 (IC8002), AV-SW2 (IC8005)	
AV-EEP	AV-EEP (IC8705)	
Interval UART Communication	PS/RST	No power, or reset status continued
	RETRY	The signal 0x02 (ready) has not been received.
	DEVICE	Receive System Query Request Command

7. TEMPERATURE

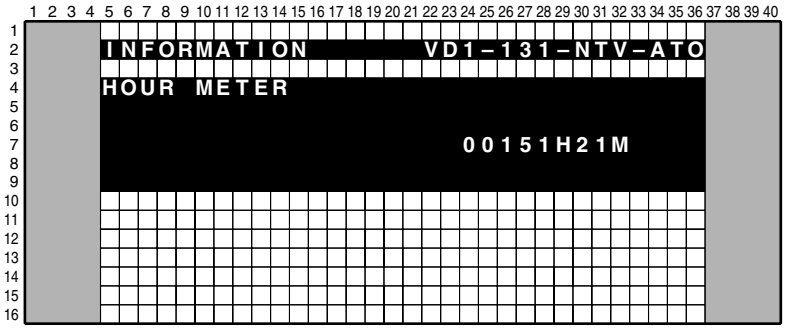


TEMP1: The value read from the temperature sensor built into the panel (PANEL SENSOR Assy) is displayed in the range of 000-255.
For reference, the approximate value for 60°C is 172 and for 35°C is 134.
Reference: When TEMP1 exceeds 195 (about 74°C), SD LED flash 4 times.

TEMP2: The value read from the temperature sensor built into the MAIN BOARD Assy is displayed in the range of 000-255.
For reference, the approximate value for 60°C is 86 and for 35°C is 67.
If the value of TEMP2 is too high, SD LED flash 11 times.

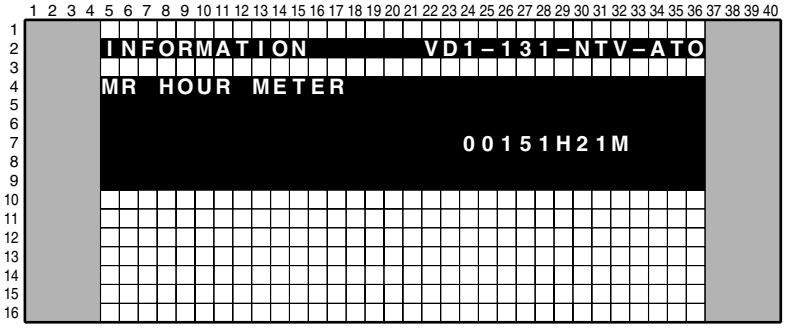
FAN: The value of the Fan output is displayed. While the power is on, all the fans rotate at a constant speed.

8. HOUR METER



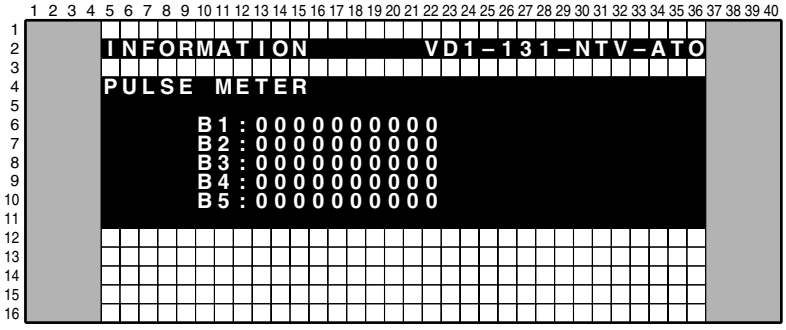
The cumulative power-on time of the panel side is displayed.

9. MR HOUR METER



The cumulative power-on time of the MR side is displayed.

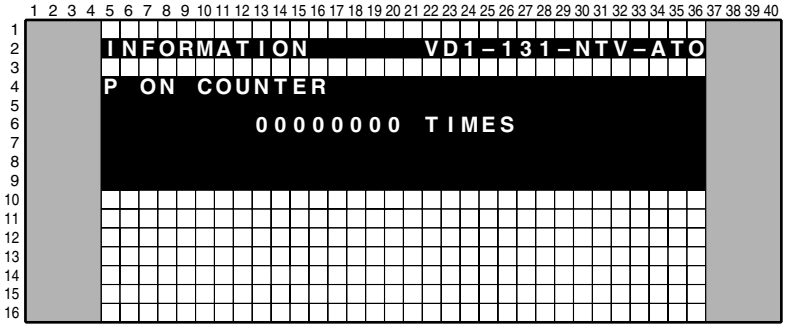
10. PULSE METER



The cumulative number of pulses of the panel is displayed.

Note : Dividing screen into sixteen times sixteen and counting five different locations on a screen. Each item, it's counted total 3840 pixels (for 50 inch) or 3072 pixels (for 43 inch) discharging. (1280/16 x 768/16 = 3840, 1204/16 x 768/16 = 3072)

11. P ON COUNTER

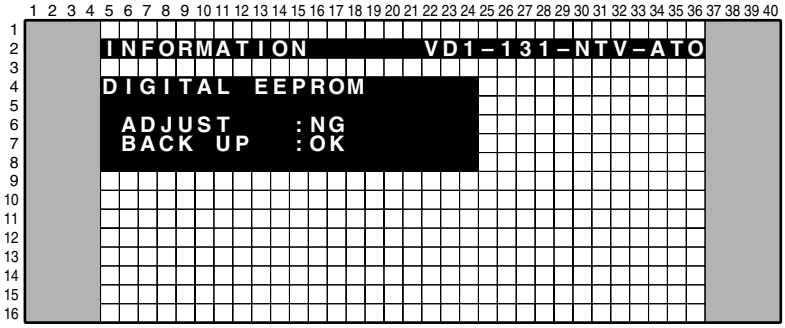


The cumulative number of times the panel was turned on is displayed.

12. DIGITAL EEPROM

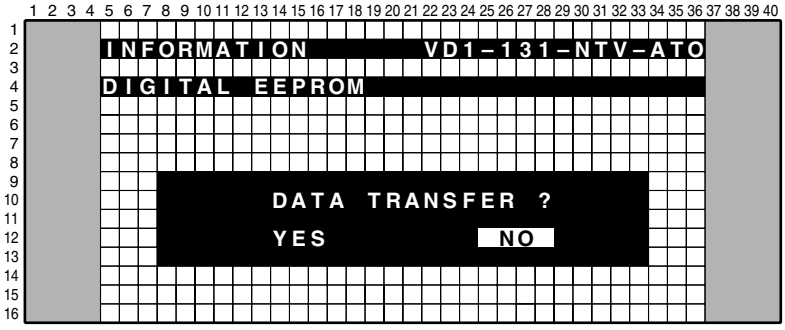
When the DIGITAL Assy of the PDP is to be replaced, the adjustment values in it can be temporarily stored in the ROM then be written on the new Assy after replacement.

Whether adjustment has been made on the DIGITAL Assy of the PDP or not (i.e., in the state of a new service part), and whether the data on any adjustment values are retained in the backup ROM or not are displayed.
(see 7.1.6 BACKUP When The MAIN Unit is Adjusted)



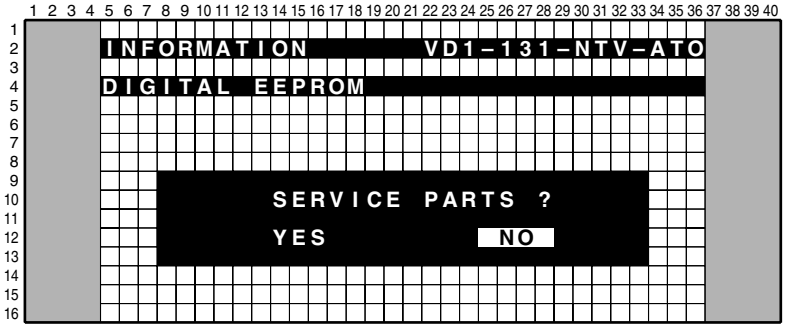
• Downloading the data from the backup ROM

(This must be performed after the DIGITAL Assy is replaced.)
To download the data from the backup ROM, press the ENTER key while the above screen is displayed. The display changes as shown below. Move the cursor to YES then press the ENTER key. The data in the backup ROM are downloaded into the new Assy.

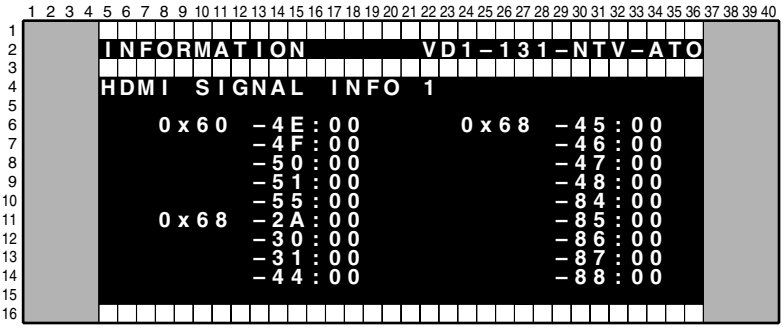


• Clearing the data in the ROM of the DIGITAL Assy

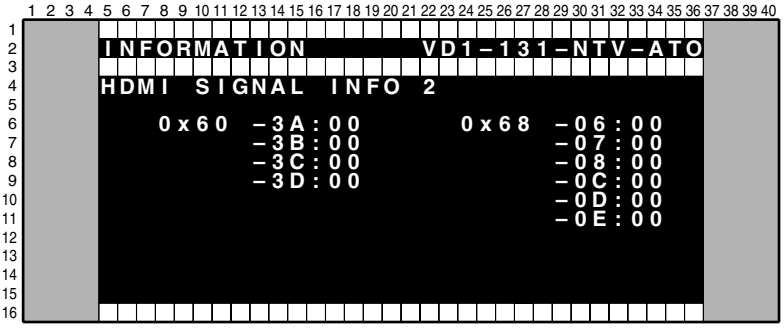
The display below is automatically displayed after either YES or NO is selected on the display shown above. Move the cursor to YES then press the ENTER key. Then all data on adjustment values in the ROM of the DIGITAL Assy are cleared.



13. HDMI SIGNAL INFO

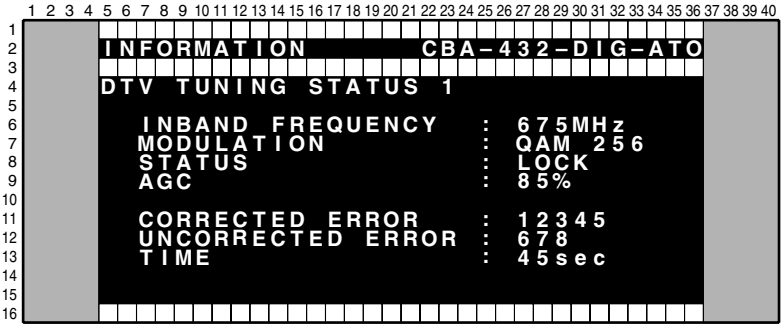


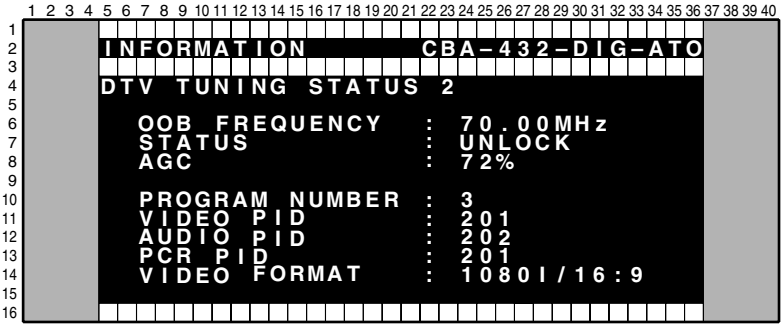
Technical examination display
(Reading status registers in HDMI receiver and displaying them by HEX value.)



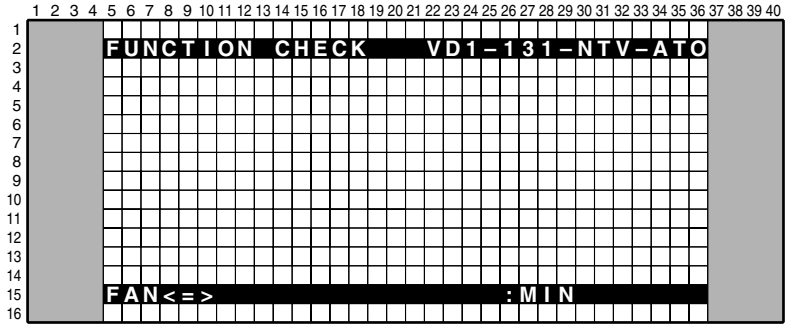
For technical discussion

14.DTV TUNING STATUS





② FUNCTION CHECK



No last memory in this menu

No.	Display	Detail	Remarks	232C Command
1	FAN <=>	MIN ⇔ CNT ⇔ MAX		
2	AFT <=>	UNLOCKED ⇔ LOCKED	For Factory use	AFT

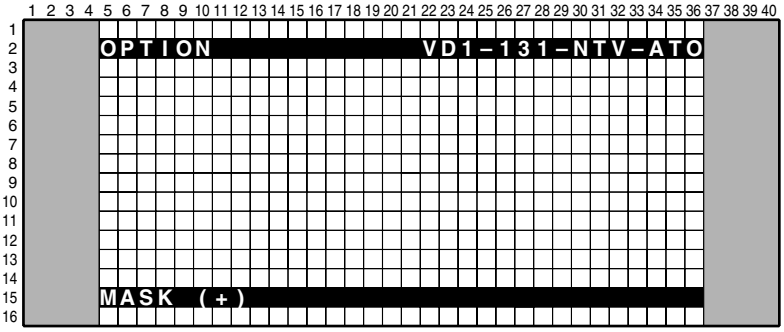
2.1 FAN

Controls FAN (FAN and FAN2) speed by force. (MIN : STOP, CNT : Follows movement specifications, MAX : High)
Temp sensor is working only displaying data value in service factory mode.
After getting off service factory mode, this function is set to normal automatically.

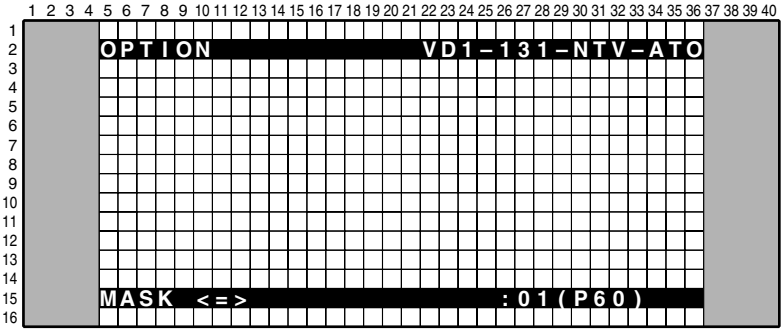
2.2 AFT LOCK

For production line use only
Stop AFT tuner received function and receive a center frequency.
After turning off a unit (including stand-by mode), this setting is set normal (AFT function) automatically.
It's performed to two tuner and DTV tuner to U.S. model.

⑤ OPTION mode



No.	Function/Display	Content	Corresponding RS-232C Command
1	MASK (+)	Selecting the pattern mask of IC4	MSK
2	PEAK LIMITTER	ON ⇔ OFF	PLT
3	DYNAMIC RANGE	ON ⇔ OFF	DYR
4	EDID WRITE MODE	DISABLE ⇔ ENABLE	EPA
5	CH PRESET	FACTORY ⇔ USER	



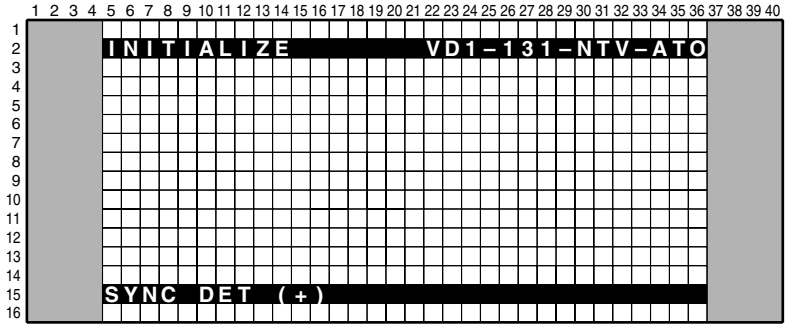
The mask frequency can be cyclically changed (see the table below) by pressing the left or right cursor key. The mask pattern can be cyclically changed by pressing the up or down cursor key. Approximately 2 seconds after either the up or down cursor key is pressed, the mask screen will appear.

• Frequency selection while the mask is displayed

No.	Function/Display	Content	Corresponding RS-232C Command
0	V50	Not used (Video 50-Hz sequence)	F50
1	V60 (initial value)	Video 60-Hz sequence	F60
2	P60	Not used (PC 60-Hz sequence)	F61
3	P70	Not used (PC 70-Hz sequence)	F70
4	V72	Video 72-Hz sequence	F72
5	V75	Not used (Video 75-Hz sequence)	F75

⑥ INITIALIZE mode

(For managing switching of the initial settings and destination setting)



No.	Function/Display	Content
1	SYNC DET (+)	
2	DRIVE MODE (+)	
3	SIDE MASK LEVEL (+)	
4	PANEL REVISE (+)	
5	FINAL SETUP (+)	Executing the final set up
6	C TEMP LOW (+)	
7	C TEMP MID LOW (+)	
8	C TEMP MID (+)	
9	C TEMP MID HIGH (+)	
10	C TEMP HIGH (+)	
11	UART SELECT <=>	1200-232C ⇔ ••• ⇔ 38400-232C ⇔ 9600-SR+
12	CVT AUTO <=>	DISABLE ⇔ ENABLE (For Factory use)
13	HDMI INTR POSITION(+)	
14	SUS FREQ MODE<=>	000⇔ ••• ⇔ 007

• When there is a modification log, if the “Display” key is held pressed for at least 3 seconds while the above display is displayed, the modification log will be cleared.

• UART SELCT

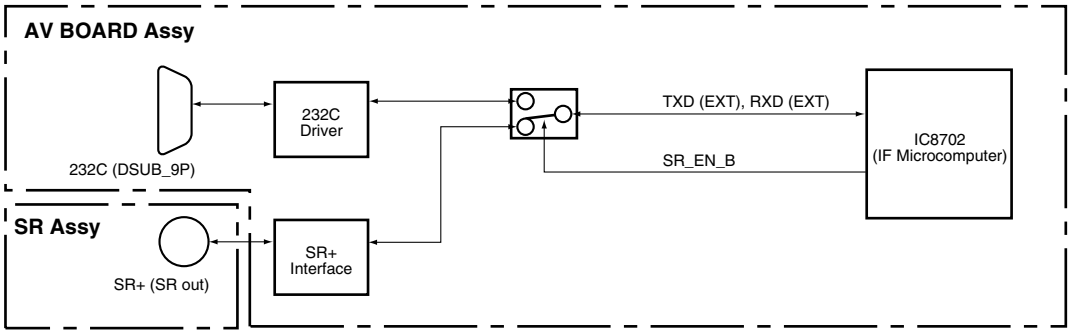
Option No.	Function / Display	Operation / Control	Remarks
1 (initial setting)	9600-SR+	To set to SR+ (9600 BPS)	For switching external communication between RS-232C and SR+
2	1200-232C	To set to RS-232C (1200 BPS)	
3	2400-232C	To set to RS-232C (2400 BPS)	
4	4800-232C	To set to RS-232C (4800 BPS)	
5	9600-232C	To set to RS-232C (9600 BPS)	
6	19200-232C	To set to RS-232C (19200 BPS)	
7	38400-232C	To set to RS-232C (38400 BPS)	

Tips: How to change the SR+/RS-232C setting without entering Service Factory mode
Refer to "6.6 USING RS-232C COMMANDS".

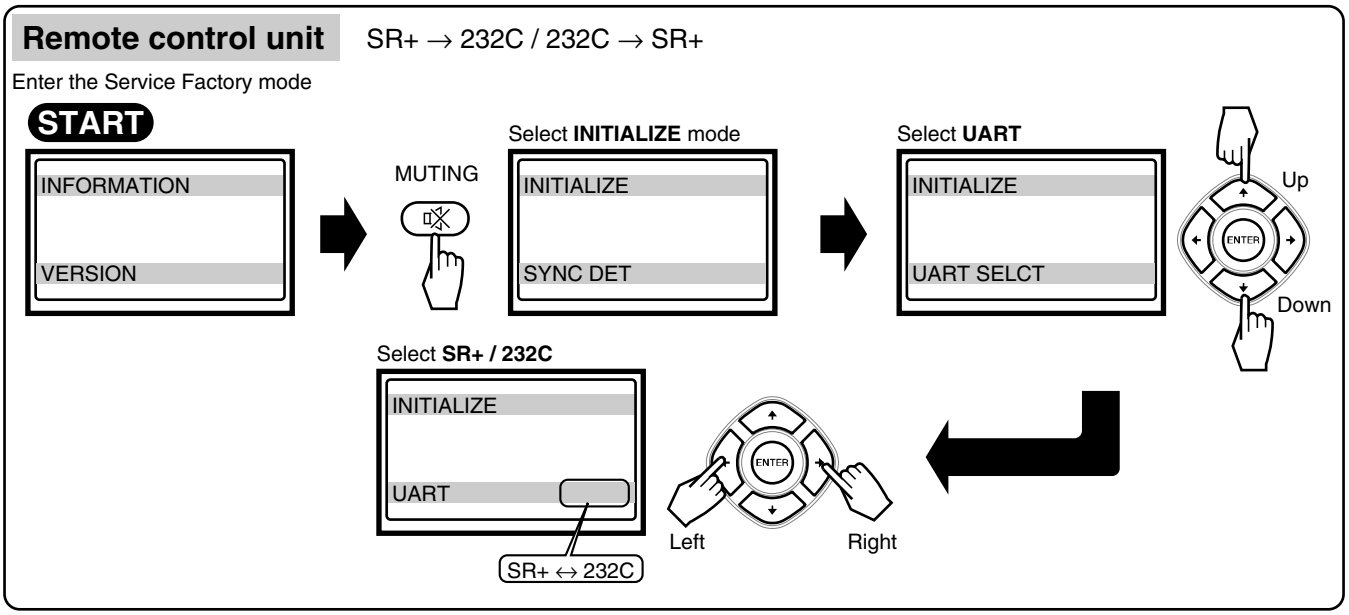
6.6 USING RS-232C COMMANDS

For the PDP-4350SX and PDP-5050SX series Plasma Displays, the circuitry is structured as shown in the diagram below to support the SR+ system. Controlling with either the SR+ system or RS-232C commands can be selected. As the SR+ system is selected at shipment, to control with RS-232C commands in servicing it is necessary to switch the paths. After servicing, be sure to return the setting to the SR+ system.

● Rough diagram of switching between SR+ and RS-232C



● How to switch from SR+ to RS-232C



Tips: How to change the SR+/RS-232C setting without entering Service Factory mode
Hold the **VOLUME** ◿+ or ◿– key on the remote control unit pressed for 3-10 seconds during Standby mode.
Then within 3 seconds after the key is released, hold the **SPLIT** key on the remote control unit pressed for 3-10 seconds.
Then within 3 seconds after the key is released, use the **ENTER** key on the remote control unit to set to RS-232C (the baud rate last selected is chosen) or the **HOME MENU** key to set to SR+.

6.7 LIST OF RS-232C COMMANDS

Command	Function	Validity of direct numeric input		
		Validity	Lower limit	Upper limit
A				
ABL	Adjusting the upper limit of the power	❍	000	255
AMTS00	Turning off the audio muting			
AMTS01	Turning on the audio muting			
B				
BCP	Copying the backup data in the EEPROM			
BSL	Adjusting side mask B	❍	000	255
BYG	BY GAIN	❍	000	255
C				
CHM	Clearing data of the hour meter			
CNG	Clearing shutdown (SD2) information			
CPC	Clearing the power-on counter			
CPD	Clearing power-down information			
CPM	Clearing the pulse meter			
CSD	Clearing shutdown (SD1) information			
CTM	Clearing the trap switch			
D				
DRF	Turning off the power for the drive system			
DRN	Turning on the power for the drive system			
DW*	Decreasing the adjustment value by * [*: 1-9, 0 (0 means 10), or F (making the adjustment value the minimum)]			
DYRS00	D-range correction NO			
DYRS01	D-range correction YES			
F				
F60	Setting the frequency in Mask mode to 60 Hz (VIDEO)			
F72	Setting the frequency in Mask mode to 72 Hz (VIDEO)			
FAJ	Determining the flag of the DIGITAL VIDEO Assy adjustment in "adjustment is completed"			
FAN	Turning Service Factory mode off			
FAY	Turning Service Factory mode on			
FST	Executing the FINAL SETUP			
G				
GAJ	Obtaining various adjustment values			
GMM	Switching the gamma			
GNG	Obtaining the shutdown (SD2) information			
GPC	Obtaining the value of P ON COUNTER			
GPD	Obtaining the power-down-point log			
GPM	Obtaining the PULSE METER data			
GPW	Obtaining the panel white-balance adjustment values			

Command	Function	Validity of direct numeric input		
		Validity	Lower limit	Upper limit
G				
GS1	Obtaining information on the unit, such as the software version			
GS2	Obtaining information on the status of the unit, such as the temperature			
GS6	Obtaining the any version			
GSD	Obtaining information on shutdown(SD1)			
GSL	Adjusting side mask G	O	000	255
GYG	GY GAIN	O	000	255
I				
INPS01	Input selection: Input 1			
INPS02	Input selection: Input 2			
INPS03	Input selection: Input 3			
INPS04	Input selection: Input 4			
INA	Selection of the tuner (Antenna A)			
INB	Selection of the tuner (Antenna B)			
M				
MSKS00	Turning the Mask function off			
MSKS01	White raster (change in luminance level)			
MSKS02	White raster--zigzag, exact reverse--scan--gray--white raster			
MSKS03	HL--zigzag, exact reverse--scan--gray--white raster			
MSKS04	White raster--zigzag, exact reverse--scan--gray--white raster			
MSKS10	H ramp (slant 1)			
MSKS11	H ramp (slant 4)			
MSKS12	H ramp (slant 1 shifting)			
MSKS13	H ramp (slant 4 shifting)			
MSKS14	V ramp (slant 1)			
MSKS15	Slanting ramp			
M1G	IC1 MAIN GAIN	O	064	191
M1O	IC1 MAIN OFFSET	O	064	191
MSKS20	Window (for WB adjustment, Hi = 870, Lo = 102)			
MSKS21	Window (for WB adjustment, Hi = 1023, Lo = 102)			
MSKS22	Window (for measuring the peak luminance during WB adjustment, Hi = 1023)			
MSKS23	Window (for measuring the peak luminance, Hi = 1023, 4%)			
MSKS24	Window (for measuring the peak luminance, Hi = 1023, 1.25%)			
MSKS25	Window (vertical line with 1/7-width for measuring the stress)			
MSKS26	Window (magenta, green, and stripe for check)			
MSKS27	Window (green,magenta, and stripe for check)			
MSKS28	Window (black & white [1 x 8], checker, for EMG check)			
MSKS29	Window (for WB adjustment, magenta = 512, yellow = 512)			
MSKS30	ColorBar			
MSKS31	Slanted lines (for checking cable disconnection)			
MSKS40	Wiper for erasing afterimage			
MSKS51	Raster-white			
MSKS52	Raster-red			
MSKS53	Raster-green			
MSKS54	Raster-blue			

Command	Function	Validity of direct numeric input		
		Validity	Lower limit	Upper limit
M				
MSKS55	Raster-black			
MSKS56	Raster-cyan 1023			
MSKS57	Raster-magenta 1023			
MSKS58	Raster-yellow 1023			
MSKS59	Raster-cyan 274			
MSKS60	Raster-flesh color_			
MSKS61	Raster-light purple_50			
MSKS62	Raster-sky blue_50			
MSKS63	Raster-red 779			
MSKS64	Raster-cyan 218			
MSKS65	Raster-cyan 448			
MSKS66	Raster-flesh color_43			
MSKS67	Raster-red 640			
MSKS68	Raster-magenta 98			
MSKS69	Raster-sky blue 1_43			
MSKS70	Raster-sky blue 2_43			
MSKS71	Raster-light purple_43			
MSKS72	Raster-blue 960			
MSKS73	Raster-yellow 512			
MSKS74	Raster-gray 512 (reservation)			
MBG	AD MAIN B GAIN	○	000	255
MBO	AD MAIN B OFFSET	○	064	191
MGG	AD MAIN G GAIN	○	000	255
MGO	AD MAIN G OFFSET	○	064	191
MRG	AD MAIN R GAIN	○	000	255
MRO	AD MAIN R OFFSET	○	064	191
N				
NGN	SD function off			
O				
OSDS00	Turning off the on-screen display (On-screen display is prohibited.)			
OSDS01	Turning on the on-screen display (While the OSDS01 command is in force, the duration of on-screen display is)			
P				
PLTS00	PEAK LIMITER OFF			
PLTS01	PEAK LIMITER ON			
PBH	Panel white-balance adjustment: Blue highlight	○	000	511
PBL	Panel white-balance adjustment: Blue low light	○	000	999
PDN	The PD signal is not passed through the POWER SUPPLY Assy.			
PDY	The PD signal is passed through the POWER SUPPLY Assy.			
PGH	Panel white-balance adjustment: Green highlight	○	000	511
PGL	Panel white-balance adjustment: Green low light	○	000	999

Command	Function	Validity of direct numeric input		
		Validity	Lower limit	Upper limit
P				
POF	Power off			
PON	Power on			
PRH	Panel white balance adjustment-red highlight	○	000	511
PRL	Panel white-balance adjustment: Red low light	○	000	999
R				
RSL	Adjustment of side mask R	○	000	255
RYG	RY GAIN	○	000	255
S				
S1G	IC1 SUB GAIN	○	064	191
S1O	IC1 SUB OFFSET	○	064	191
SBG	AD SUB B GAIN	○	000	255
SBO	AD SUB B OFFSET	○	064	191
SGG	AD SUB G GAIN	○	000	255
SGO	AD SUB G OFFSET	○	064	191
SRG	AD SUB R GAIN	○	000	255
SRO	AD SUB R OFFSET	○	064	191
T				
TSN	Trap SW is invalid			
TSY	Enabling the TRAP switch (The command is effective even during Standby mode.)			
U				
UAJ	Return the DIGITAL VIDEO Assy to service parts			
UP*	Increasing the adjustment value by * [*: 1-9, 0 (0 means 10), or F (making the adjustment value the maximum)]			
V				
VMTS00	Canceling panel muting			
VMTS01	Panel muting			
VOF	Offset voltage adjustment	○	000	255
VOL	Adjusting the audio volume	○	000	060
VSG	CVY GAIN	○	064	191
VSU	SUS voltage adjustment	○	000	255

Command	Function	Validity of direct numeric input		
		Validity	Lower limit	Upper limit
X				
XD1	D1 trailing-edge pulse of X-SUS	○	000	255
XD2	D2 trailing-edge pulse of X-SUS	○	000	255
XU1	U1 leading-edge pulse of X-SUS	○	000	255
XU2	U2 leading-edge pulse of X-SUS	○	000	255
Y				
YD1	D1 trailing-edge pulse of Y-SUS	○	000	255
YD2	D2 trailing-edge pulse of Y-SUS	○	000	255
YD3	D3 trailing-edge pulse of Y-SUS	○	000	255
YD4	D4 trailing-edge pulse of Y-SUS	○	000	255
YU1	U1 leading-edge pulse of Y-SUS	○	000	255
YU2	U2 leading-edge pulse of Y-SUS	○	000	255

6.8 OUTLINE OF COMMANDS

■ Command description

GAJ: Obtaining data on ABL setting values, electronic-control adjustment values, and drive-system adjustment values

Order	Data	Size	Remarks
1	ABL table currently used	3 bytes	AB1 - AB3 (*)
2	ABL adjustment value	3 bytes	000 - 255
3	Vsus adjustment value	3 bytes	000 - 255
4	Vofs adjustment value	3 bytes	000 - 255
5	X-SUS-U1 adjustment value (XU1)	3 bytes	000 - 255
6	X-SUS-U2 adjustment value (XU2)	3 bytes	000 - 255
7	X-SUS-D2 adjustment value (XD2)	3 bytes	000 - 255
8	X-SUS-D1 adjustment value (XD1)	3 bytes	000 - 255
9	Y-SUS-U1 adjustment value (YU1)	3 bytes	000 - 255
10	Y-SUS-U2 adjustment value (YU2)	3 bytes	000 - 255
11	Y-SUS-D1-2 adjustment value (YD2)	3 bytes	000 - 255
12	Y-SUS-D1-1 adjustment value (YD1)	3 bytes	000 - 255
13	Y-SUS-D2-2 adjustment value (YD4)	3 bytes	000 - 255
14	Y-SUS-D2-1 adjustment value (YD3)	3 bytes	000 - 255

Note: Ignore the 2-byte checksum at the end.

(*)

Data	Table
AB1	ABL table for NTSC
AB2	Not used (ABL table for PAL)
AB3	Not used (ABL table for PC)

GPD: Obtaining power-down-point log on the panel

Order	Data	Size	Remarks
1	Latest "1st PD" data	1 byte	0-D or F
2	Latest "2nd PD" data	1 byte	0-D or F
3	Data of hour meter for the latest PD	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute
4	Data on temperature for the latest PD (TEMP1)	3 bytes	000 - 255
5	Second latest "1st PD" data	1 byte	0-D or F
6	Second latest "2nd PD" data	1 byte	0-D or F
7	Data of hour meter for the second latest PD	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute
8	Data on temperature for the second latest PD (TEMP1)	3 bytes	000 - 255
9	Third latest "1st PD" data	1 byte	0-D or F
10	Third latest "2nd PD" data	1 byte	0-D or F
11	Data of hour meter for the third latest PD	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute
12	Data on temperature for the third latest PD (TEMP1)	3 bytes	000 - 255
13	Fourth latest "1st PD" data	1 byte	0-D or F
14	Fourth latest "2nd PD" data	1 byte	0-D or F
15	Data of hour meter for the fourth latest PD	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute
16	Data on temperature for the fourth latest PD (TEMP1)	3 bytes	000 - 255
17	Fifth latest "1st PD" data	1 byte	0-D or F
18	Fifth latest "2nd PD" data	1 byte	0-D or F
19	Data of hour meter for the fifth latest PD	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute
20	Data on temperature for the fifth latest PD (TEMP1)	3 bytes	000 - 255
21	Sixth latest "1st PD" data	1 byte	0-D or F
22	Sixth latest "2nd PD" data	1 byte	0-D or F
23	Data of hour meter for the sixth latest PD	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute
24	Data on temperature for the sixth latest PD (TEMP1)	3 bytes	000 - 255
25	Seventh latest "1st PD" data	1 byte	0-D or F
26	Seventh latest "2nd PD" data	1 byte	0-D or F
27	Data of hour meter for the seventh latest PD	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute
28	Data on temperature for the seventh latest PD (TEMP1)	3 bytes	000 - 255
29	Eighth latest "1st PD" data	1 byte	0-D or F
30	Eighth latest "2nd PD" data	1 byte	0-D or F
31	Data of hour meter for the eighth latest PD	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute
32	Data on temperature for the eighth latest PD (TEMP1)	3 bytes	000 - 255

Notes: • Ignore the 2-byte checksum at the end.
• For details, see "Description on power-down."

• Description on power-down

Data	Power-down Point
0	No power-down
1	Not used
2	Panel-POWER SUPPLY
3	SCAN
4	SCN-5V
5	Y-DRIVE
6	Y-DCDC
7	Y-SUS
8	ADR
9	X-DRIVE
A	X-DCDC
B	X-SUS
C	DIG-DCDC
D	IC4
E	Reservation
F	Power-down point unidentified

GPW: Obtaining panel white-balance adjustment values

Order	Data	Size	Remarks
1	W/B table currently used	3 bytes	PT1 - PT3 (*)
2	Main contrast	4 bytes	0000 - 0511
3	Red contrast of W/B adjustment value	4 bytes	0000 - 0511
4	Green contrast of W/B adjustment value	4 bytes	0000 - 0511
5	Blue contrast of W/B adjustment value	4 bytes	0000 - 0511
6	Main brightness	4 bytes	0000 - 1023
7	Red brightness of W/B adjustment value	4 bytes	0000 - 1023
8	Green brightness of W/B adjustment value	4 bytes	0000 - 1023
9	Blue brightness of W/B adjustment value	4 bytes	0000 - 1023

Note: Ignore the 2-byte checksum at the end.

(*)

Data	Table
PT1	W/B table for NTSC
PT2	Not used (W/B table for PAL)
PT3	Reserved table

(Reference) GS2: Obtaining information on the status of the unit

Order	Data	Size	Remarks
1	Notifying that the unit is shifting to Standby mode	1 byte	1: OK for shifting to Standby
2	Whether or not the main unit has been adjusted	1 byte	0: Adjusted, 1: Not adjusted
3	With/without backup for adjustment values	1 byte	0: With backup, 1: Without backup
4	Data on power-down	2 bytes	1st byte: 1st PD, 2nd byte: 2nd PD
5	Data on temperature (TEMP1)	3 bytes	000 - 255
6	Abnormality in RST2 (power decrease of DC-DC converter)	1 byte	0: Normal, 1: SD process completed, 2: In the process of SD warning
7	IC4 communication failure	1 byte	0: Normal, 1: SD process completed, 2: In the process of SD warning
8	EEPROM communication failure	1 byte	0: Normal, 1: SD process completed, 2: In the process of SD warning
9	Audio failure	1 byte	0: Normal, 1: SD process completed, 2: In the process of SD warning
10	Volume IC communication failure	1 byte	0: Normal, 1: SD process completed, 2: In the process of SD warning
11	Backup ROM communication failure	1 byte	0: Normal, 1: SD process completed, 2: In the process of SD warning
12	Data on temperature (TEMP1) not obtained	1 byte	0: Normal, 1: SD process completed, 2: In the process of SD warning
13	Operational status of panel protection mechanism	1 byte	0: Protection mechanism not activated, 1: Protection mechanism activated
14	Reservation	2 bytes	**
15	Accumulated time of cleared hour-meter (*1)	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute
16	Hour-meter (clearable) (*2)	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute

Notes: • Ignore the 2-byte checksum at the end.
• The data expected to be used for service may be "5. Data on temperature" and "15,16. Hour meter".
(*1) Each time hour-meter data are cleared, the accumulated time data are updated. The total for data items 15 and 16 is the total power-on time after shipment. The accumulated time of cleared hour-meter data cannot be cleared.
(*2) The hour-meter data that indicate driving hours of the panel are displayed on the Factory menu. Upon shipment, the data are cleared.

GSD: Obtaining information on shutdown [SD1]

Order	Data	Size	Remarks
1	Latest SD data	1 byte	0 - 5
2	Latest SD subcategory data	1 byte	0 - 3
3	Data of hour meter for the latest SD	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute
4	Data on temperature for the latest SD (TEMP1)	3 bytes	000 - 255
5	Second latest SD data	1 byte	0 - 5
6	Second latest SD subcategory data	1 byte	0 - 3
7	Data of hour meter for the second latest SD	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute
8	Data on temperature for the second latest SD (TEMP1)	3 bytes	000 - 255
9	Third latest SD data	1 byte	0 - 5
10	Third latest SD subcategory data	1 byte	0 - 3
11	Data of hour meter for the third latest SD	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute
12	Data on temperature for the third latest SD (TEMP1)	3 bytes	000 - 255
13	Fourth latest SD data	1 byte	0 - 5
14	Fourth latest SD subcategory data	1 byte	0 - 3
15	Data of hour meter for the fourth latest SD	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute
16	Data on temperature for the fourth latest SD (TEMP1)	3 bytes	000 - 255
17	Fifth latest SD data	1 byte	0 - 5
18	Fifth latest SD subcategory data	1 byte	0 - 3
19	Data of hour meter for the fifth latest SD	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute
20	Data on temperature for the fifth latest SD (TEMP1)	3 bytes	000 - 255
21	Sixth latest SD data	1 byte	0 - 5
22	Sixth latest SD subcategory data	1 byte	0 - 3
23	Data of hour meter for the sixth latest SD	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute
24	Data on temperature for the sixth latest SD (TEMP1)	3 bytes	000 - 255
25	Seventh latest SD data	1 byte	0 - 5
26	Seventh latest SD subcategory data	1 byte	0 - 3
27	Data of hour meter for the seventh latest SD	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute
28	Data on temperature for the seventh latest SD (TEMP1)	3 bytes	000 - 255
29	Eighth latest SD data	1 byte	0 - 5
30	Eighth latest SD subcategory data	1 byte	0 - 3
31	Data of hour meter for the eighth latest SD	7 bytes	1st-5th byte: Hour, 6th-7th byte: Minute
32	Data on temperature for the eighth latest SD (TEMP1)	3 bytes	000 - 255

Notes: • Ignore the 2-byte checksum at the end.
• For details, see "Description on shutdown".

• Description of shutdown

Data	Factors of shutdown
0	No abnormality
1	IC4 (DIGITAL VIDEO Assy: IC5401)
2	Module microcomputer IIC
3	Abnormality in RST2 (power decrease of DC-DC converter)
4	Panel having high temperature
5	Audio failure (speakers short-circuited)
6	Reservation
7	Reservation
8	Reservation
9	Reservation
A	Reservation
B	Reservation
C	Reservation
D	Reservation
E	Reservation
F	Reservation

• Module microcomputer IIC: Data on SD subcategory

Data	Factors of shutdown
0	No subcategory
1	EEPROM (DIGITAL VIDEO Assy : IC5206)
2	EEPROM (MAIN BOARD Assy : IC7405)
3	Volume IC (AUDIO Assy: IC3502)
4	Reservation
5	Reservation
6	Reservation
7	Reservation
8	Reservation
9	Reservation
A	Reservation
B	Reservation
C	Reservation
D	Reservation
E	Reservation
F	Reservation

GNG: Returning the data (logs) on power-down and shutdown of the MR side [SD2]

Order	Data	Size	Order	Data	Size
1	Latest NG data	1 byte	17	Fifth latest NG data	1 byte
2	Data of subcategory for the latest NG	1 byte	18	Data of subcategory for the fifth latest NG	1 byte
3	Data of MR hour meter for the latest NG	7 bytes	19	Data of MR hour meter for the fifth latest NG	7 bytes
4	Data on temperature for the latest NG (TEMP2)	3 bytes	20	Data on temperature for the fifth latest NG (TEMP2)	3 bytes
5	Second latest NG data	1 byte	21	Sixth latest NG data	1 byte
6	Data of subcategory for the second latest NG	1 byte	22	Data of subcategory for the sixth latest NG	1 byte
7	Data of MR hour meter for the second latest NG	7 bytes	23	Data of MR hour meter for the sixth latest NG	7 bytes
8	Data on temperature for the second latest NG (TEMP2)	3 bytes	24	Data on temperature for the sixth latest NG (TEMP2)	3 bytes
9	Third latest NG data	1 byte	25	Seventh latest NG data	1 byte
10	Data of subcategory for the third latest NG	1 byte	26	Data of subcategory for the seventh latest NG	1 byte
11	Data of MR hour meter for the third latest NG	7 bytes	27	Data of MR hour meter for the seventh latest NG	7 bytes
12	Data on temperature for the third latest NG (TEMP2)	3 bytes	28	Data on temperature for the seventh latest NG (TEMP2)	3 bytes
13	Fourth latest NG data	1 byte	29	Eighth latest NG data	1 byte
14	Data of subcategory for the fourth latest NG	1 byte	30	Data of subcategory for the eighth latest NG	1 byte
15	Data of MR hour meter for the fourth latest NG	7 bytes	31	Data of MR hour meter for the eighth latest NG	7 bytes
16	Data on temperature for the fourth latest NG (TEMP2)	3 bytes	32	Data on temperature for the eighth latest NG (TEMP2)	3 bytes

• Details on the NG data

Data	Cause of Shutdown
0	No abnormality
1	Power-down of the MR power supply
2	Communication failure of the module microcomputer
3	Three-wire serial communication failure of the main microcomputer
4	IIC communication failure of the main microcomputer
5	Communication failure of the main microcomputer
6	Having abnormally high temperature (TEMP2)
7	Fan stopped
8	Failure of the UART communication
9	Abnormality in RST2 (Main microcomputer) (power decrease of DC-DC converter)

• Data on the subcategories for failure in 3-wire serial communication of the main microcomputer

Data	Cause of Shutdown
0	No subcategory
1	Communication failure of the IF microcomputer
2	IC2 communication failure
3	IC3 communication failure

• Data on the subcategories for failure in the digital tuner

Data	Cause of Shutdown
0	No subcategory (DTV for North America)
1	Communication failure of the DTV microcomputer (PS/RST)
2	DTV NG (DEVICE)
3	DTV microcomputer (CMD)
4	DTV microcomputer communication (RETRY)
5	Not used [PC CARD Communication NG (CD-COM)]
6	Not used [PC CARD Mdule (CD-DEV)]
7	Not used [PC CARD Reset NG (CD-RST)]

• Data on the subcategories for failure in IIC communication of the main microcomputer

Data	Cause of Shutdown
0	No subcategory
1	EEPROM (128k) (IC7205)
2	Not used (GCR)
3	IC1 main (IC6107)
4	IC1 sub (IC6255)
5	AD-PLL main (IC6402)
6	AD-PLL sub (IC6602)
7	IC6 (IC6951)
8	Not used (HDMI1)
9	HDMI2(IC6881)
A	7-3VIDEO SW (IC8002)
B	6-2RGB SW (IC8005)
C	Front end 1 (U7501)
D	Front end 2 (U7502)
E	CC UCOM (IC8903)
F	PANEL LINK TX (IC7401)
G	PANEL LINK RX (IC4202)
H	Not used
I	Not used
K	AV-EEP ROM

GS1: Returning information on the model and the version of the software

Order	Data	Size
1	Data on the display	3 bytes
2	Version of the module microcomputer	4 bytes
3	Version of the IC4-MANTA	4 bytes
4	Sequence version (50VIDEO)	4 bytes
5	Sequence version (50PC)	4 bytes
6	Sequence version (43VIDEO)	4 bytes
7	Sequence version (43PC)	4 bytes
8	Version of the IF microcomputer	4 bytes
9	Version of the main microcomputer boot Software	4 bytes
10	Version of the main microcomputer	4 bytes
11	Version of the IC3 boot Software	4 bytes
12	Version of the IC3 Program	4 bytes
13	Version of the IC3 Enhanced	4 bytes
14	Version of the IC3 GUI	4 bytes

Breakdown of the data on the display

Data	Model
HD5	PDP-5050SX
HD4	PDP-4350SX

GPM: Returning the data of the PDP pulse meter

Order	Data	Size
1	Pulse meter (Block area 1)	10 bytes
2	Pulse meter (Block area 2)	10 bytes
3	Pulse meter (Block area 3)	10 bytes
4	Pulse meter (Block area 4)	10 bytes
5	Pulse meter (Block area 5)	10 bytes

Note: Refer to the service manual of the panel.

GPC: Returning the cumulative number of times the power to the PDP was turned on

Order	Data	Size
1	Power-on counter	8 bytes

• Commands for clearing the logs

Parameter	Corresponding RS-232C Command
PD INFO	CPD
SD1 INFO	CSD
SD2 INFO	CNG
HOUR METER	CHM
PULSE METER	CPM
P ON COUNTER	CPC

GS6: Returning information of the Flash Device

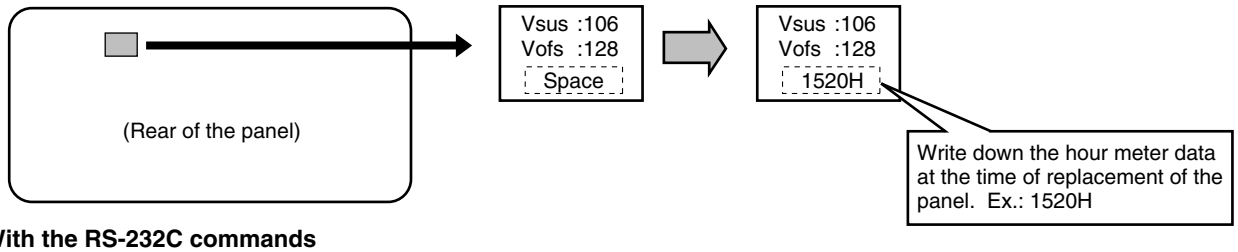
Order	Data	Size
1	Display Information	3 bytes
2	Version of the CCD UCOM	4 bytes
3	Version of the DTV Software	4 bytes
4	Version of the DTV Hardtware	2 bytes
5	Version of the DTV Hardtware Serial	6bytes
6	Not Used (Reserve)	56 bytes
7	User Password	4 bytes

6.9 METHOD FOR REPLACING THE SERVICE PANEL ASSY

The following adjustments and operations are required when the Panel Assy is replaced for servicing.

■ Adjustments of the Vsus and Vofs voltages

Input the reference adjustment values that are described on the service panel for the Vsus and Vofs voltages, with the RS-232C commands or on the Factory menu.

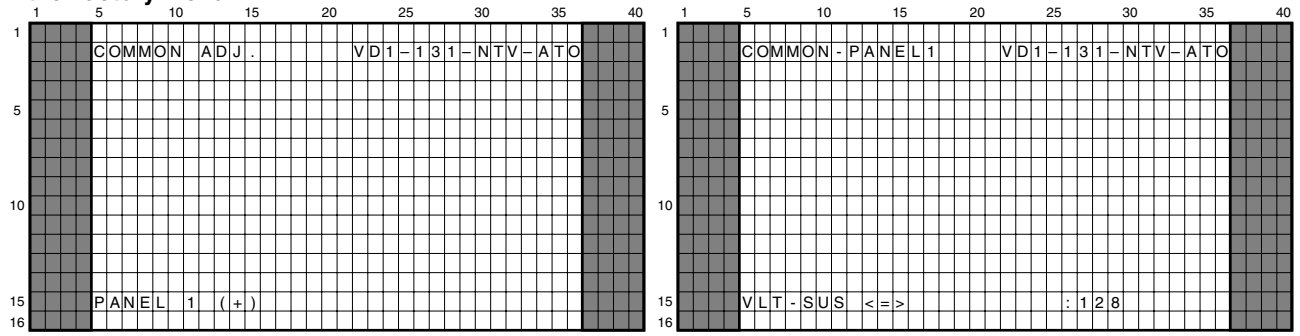


• With the RS-232C commands

Input the adjustment values described on the label attached on the rear of the panel:

- Reference adjustment of the Vsus voltage : [VSU***] Ex. : [VSU106]
- Reference adjustment of the Vofs voltage : [VOF***] Ex. : [VOF128]

• On the Factory menu



Using the MUTE key, select the main item "COMMON ADJ." Select the subitem "PANEL 1" then "VLT-SUS" or "VLT-OFS," using the ▲ or ▼ key and SET key. Enter the value, using the ◄ or ► key.

■ Clearing various logs for the panel, such as that for the hour meter

It is necessary to clear various logs, such as that for the hour meter, to match the driving hours of the panel before and after replacement. Write down the hour-meter data at the time of replacement of the panel on the label attached to the rear of the panel.

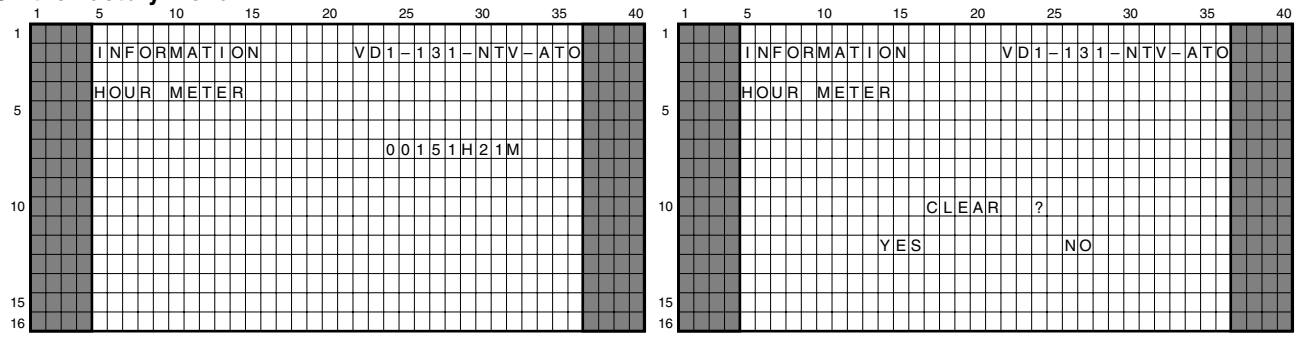
Notes: • For clearing, use the RS-232C commands or the Factory menu.
• There are two hour meters. Be careful not to mistake the MR hour meter for the hour meter for the panel.

• With the RS-232C commands

You can obtain the accumulated power-on time data of the product itself with the "GS2" RS-232C command.
(See "6.8 OUTLINE OF COMMANDS: Command description".)

1 For clearing the hour meter (for the panel) : CHM
2 For clearing the pulse meter : CPM
3 For clearing the shutdown (SD) log : CSD, CNG
4 For clearing the power-down (PD) log : CPD

• On the Factory menu



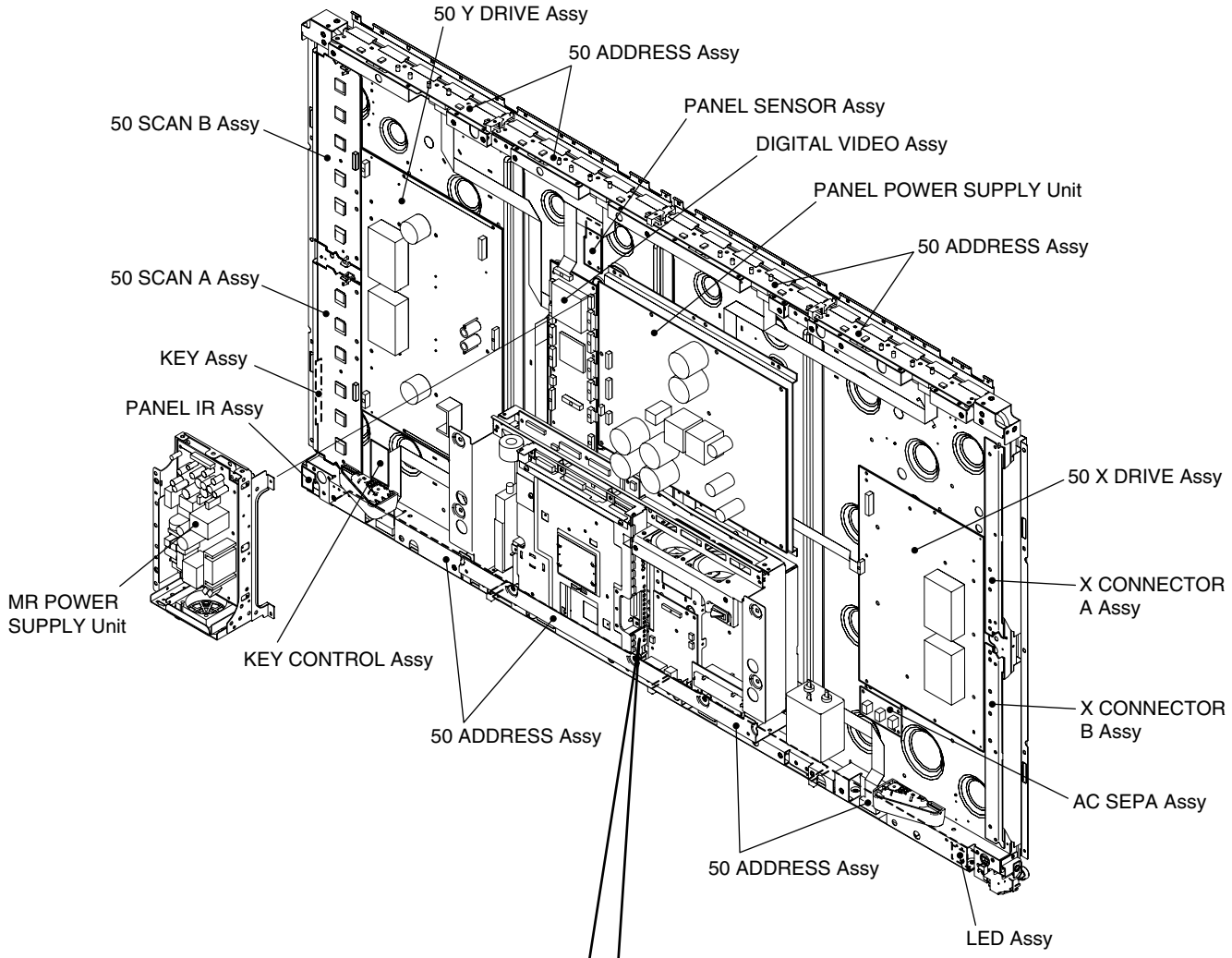
Using the MUTE key, select the main item "INFORMATION." Select the subitem "HOUR METER," using the ▲ or ▼ key and SET key. Clear the hour-meter data.
In the same way, select the subitem "PULSE METER," "SD1," or "PD" under the main item "INFORMATION" then clear the data.

7. GENERAL INFORMATION

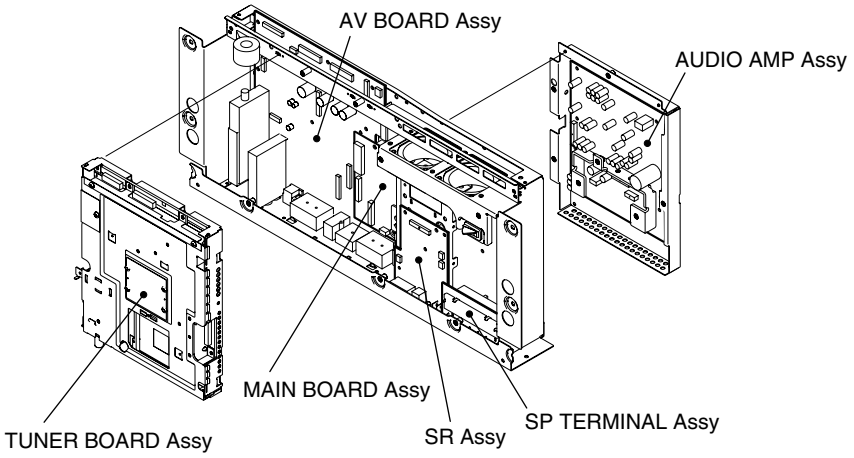
7.1 DIAGNOSIS

7.1.1 PCB LOCATION

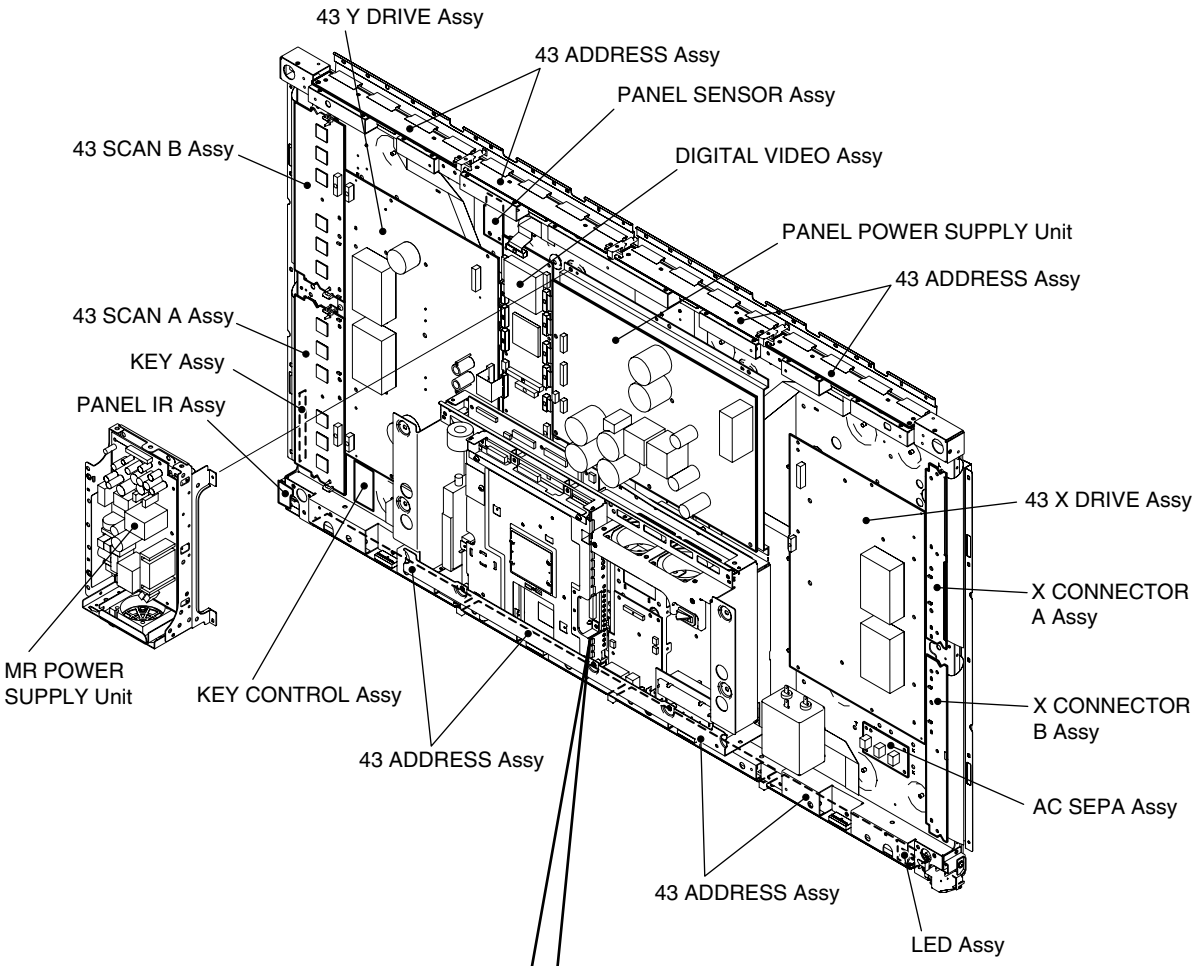
● **PDP-5050SX**



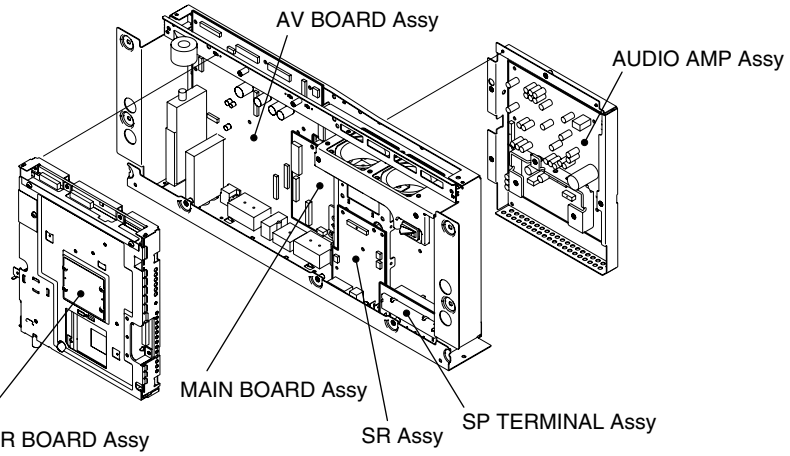
• Multi Base Assy



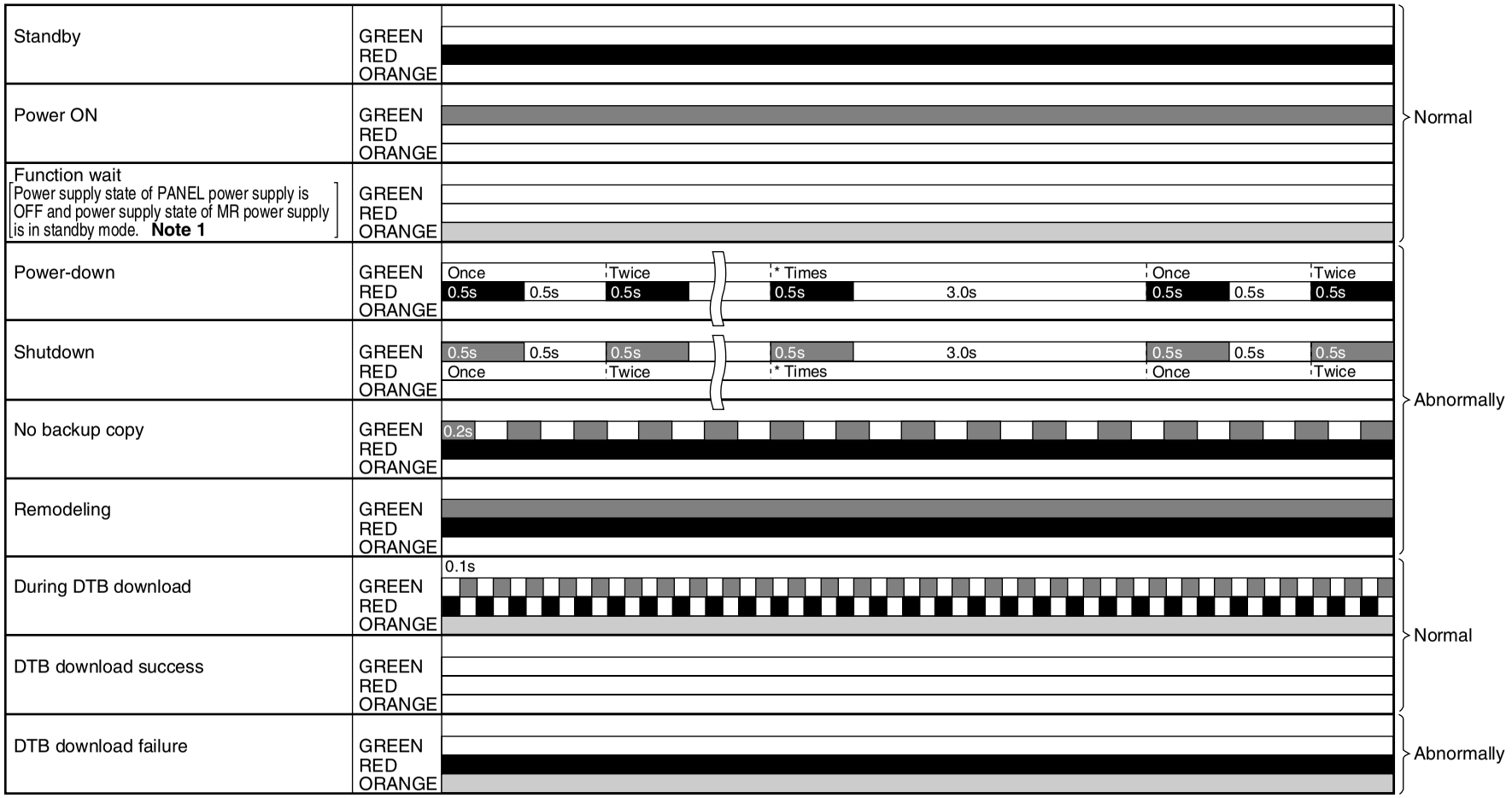
● PDP-4350SX



• **Multi Base Assy**



• LED-lighting patterns

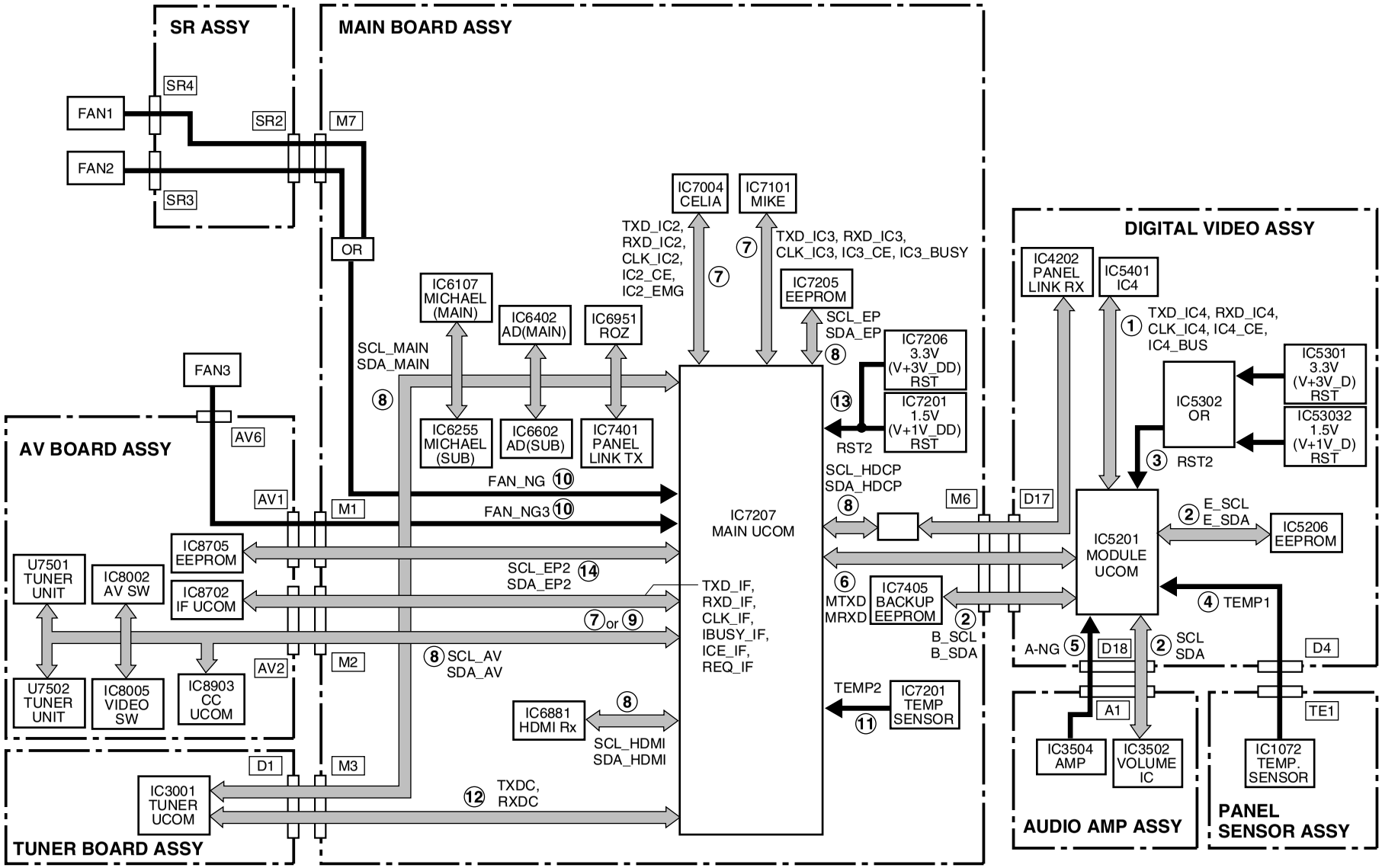


: RED LED ON
: GREEN LED ON
: ORANGE LED ON
: LED OFF

Note 1: In this state, all the secondary outputs of the Panel Power Supply Unit will be off, but the power from the secondary outputs of the MR Power Supply Unit will be output in the same way as in Standby mode.

• Block diagram of the shutdown signal system

Note:
The figures ① - ⑭ indicate the number of times the Green-LED flashes when shutdown occurs in the corresponding route.

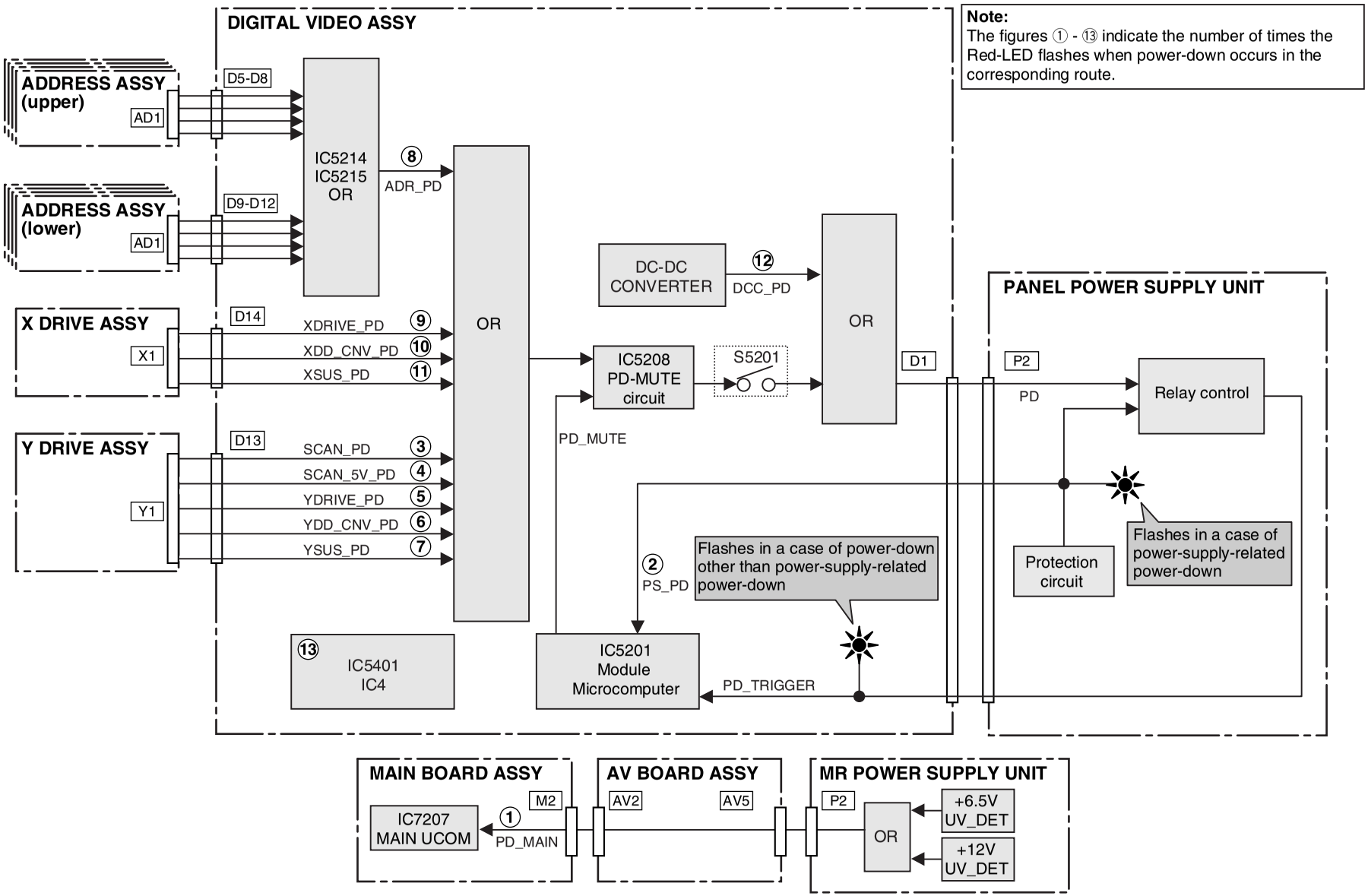


• Diagnosis of the shutdown

No. of times of LED flashing Category	Category	SD Circuit in operation	Defective Assy	Reason for shutdown	Point to be Checked	Possible Defective Part	Remarks
Green 1	SD1	Communication failure of the panel-drive IC	DIGITAL VIDEO Assy	Communication failure of IC4	IC4 BLOCK,	IC5401	
					PANEL FLASH BLOCK	IC5305	
				Writing failure of IC4			After turning the unit on again, check if the data on the version can be read with the GS1 command.
Green 2	SD2	Communication failure of the module IIC (Check the shutdown subcategory on the Factory menu.)	DIGITAL VIDEO Assy	Communication failure of the EEPROM	MODULE UCOM BLOCK	IC5206	
			MAIN BOARD Assy	Communication failure of the EEPROM	IF BLOCK	IC7405	
			AUDIO AMP Assy	Defective volume IC	AUDIO AMP Assy	IC3502	
			DIGITAL VIDEO Assy or AUDIO AMP Assy	Disconnection of cable	CN4203(D18) - CN3501(A1)		Check if the cable is disconnected or not securely connected.
Green 3	SD3	Power decrease of DIGITAL-DC-DC	DIGITAL VIDEO Assy	Defective DC-DC converter	DIGITAL DD CON BLOCK	U5602	Check if 3.3 V and 1.5V are activated.
				Defective RST IC	PANEL FLASH BLOCK	IC5301,IC5302, IC5303	
			PANEL POWER SUPPLY Assy	No startup of 12 V			
Green 4	SD4	Panel having higher temperature (TEMP1)		Panel having higher temperature	Surrounding temperature		Shutdown occurs when the sensor temperature becomes 74°C or more
			DIGITAL VIDEO Assy or PANEL SENSOR Assy	Disconnection of cable	CN5202(D4) - CN1071(TE1)		Check if the cable is disconnected or not securely connected.
Green 5	SD5	Audio failure		Speaker short-circuited	Speaker terminals		Check if the speaker cables are in contact with the chassis, etc.
			AUDIO AMP Assy	Defective AMP IC	AUDIO AMP Assy	IC3504	
			DIGITAL VIDEO Assy or AUDIO AMP Assy	Disconnection of cable	CN4203(D18) - CN3501(A1)		Check if the cable is disconnected or not securely connected.
Green 6	SD6	Communication failure of the module microcomputer	DIGITAL VIDEO Assy	Failure in Module Ucom or defective peripheral circuits	MODULE UCOM BLOCK	IC5201	
				Failure in writing in the Module Ucom			
			MAIN BOARD Assy or DIGITAL VIDEO Assy	Disconnection of cable	CN7401(M6) - CN4201(D17)		Check if the cable is disconnected or not securely connected.
				Failure in communication (MTXD, MRXD) between the IC5201(Module Ucom) and IC7207 (Main Ucom)			
Green 7	SD7	Serial communication failure of the 3-wire of the main microcomputer	MAIN BOARD Assy	Failure in CELIA or defective peripheral circuits	CELIA BLOCK	IC7004	
				Failure in MIKE or defective peripheral circuits	MIKE BLOCK	IC7101	
			AV BOARD Assy	Failure in IF Ucom or defective peripheral circuits	UIF UCOM BLOCK	IC8705	
			MAIN BOARD Assy or AV BOARD Assy	Failure in communication (TXD_IC2, RXD_IC2, CLK_IC2, IC2_CE, IC2_EMG) (TXD_IC3, RXD_IC3, CLK_IC3,IC3_CE, IC3_BUSY) between one of the above devices and IC7207 (Main Ucom)			

No. of times of LED flashing Category	Category	SD Circuit in operation	Defective Assy	Reason for shutdown	Point to be Checked	Possible Defective Part	Remarks
Green 8	SD8	IIC communication failure of the main microcomputer (Confirm the SD subcategory in the factory menu)	MAIN BOARD Assy	Failure in MICHAEL (MAIN) or defective peripheral circuits	MICHAEL BLOCK	IC6107	
				Failure in MICHAEL (SUB) or defective peripheral circuits	MICHAEL BLOCK	IC6255	
				Failure in AD (MAIN) or defective peripheral circuits	AD BLOCK	IC6402	
				Failure in AD (SUB) or defective peripheral circuits	AD BLOCK	IC6602	
				Failure in ROZ or defective peripheral circuits	ROZ BLOCK	IC6951	
				Failure in EEPROM or defective peripheral circuits	MAIN UCOM BLOCK	IC7205	
				Failure in HDMI Rx or defective peripheral circuits	HDMI RX BLOCK	IC6881	
				Failure in HDCP Tx or defective peripheral circuits	IF BLOCK	IC7401	
			AV BOARD Assy	Failure in TUNER UNIT or defective peripheral circuits	TUNER BLOCK	U7501,U7502	
				Failure in AV_SW or defective peripheral circuits	AV SW BLOCK	IC8002	
				Failure in VIDEO_SW or defective peripheral circuits	AV SW BLOCK	IC8005	
			TUNER BOARD Assy	Defective DTV tuner			
			MAIN BOARD Assy or AV BOARD Assy or TUNER BOARD Assy	Failure in communication (SCL_AV, SDA_AV, SCL_MAIN, SDA_MAIN, SCL_HDMI, SDA_HDMI, SCL_HDCP, SDA_HDCP,SCL_EP, SDA_EP) between one of the above devices and IC7207 (Main Ucom)			
Green 9	SD9	Communication failure in main microcomputer	MAIN BOARD Assy	Failure in writing in the Main Ucom	MAIN UCOM BLOCK	IC7207	
			MAIN BOARD Assy or AV BOARD Assy	Disconnection of cable	CN7455(M2) - CN8652(AV2)		Check if the cable is disconnected or not securely connected.
				Failure in communication (TXD_IF, RXD_IF,CLK_IF,BUSY_IF, CE_IF,REQ_IF) between the IC8702(IF Ucom) and IC7207 (Main Ucom)			
Green 10	SD10	Fan failure	FAN	Failure in the fan motor or fan stopped by attached dust			
			MAIN BOARD Assy or AV BOARD Assy	Disconnection of cable	CN7454(M1) - CN8651(AV1)		Check if the cable is disconnected or not securely connected.
			MAIN BOARD Assy or SR Assy		CN7454(M7) - CN8651(SR2)		
			AV BOARD Assy		FAN-CN8505(AV6)		
			SR Assy		FAN-CN9505(SR4) or FAN-CN9506(SR3)		
Green 11	SD11	Unit having higher temperature (TEMP2)		Unit having higher temperature	Surrounding temperature		
Green 12	SD12	DIGITAL TUNER	TUNER BOARD Assy	Defective DTV tuner			
			MAIN BOARD Assy or TUNER BOARD Assy	Disconnection of cable	CN7455(M2) - CN8652(AV2)		Check if the cable is disconnected or not securely connected.
				Failure in communication (TXDC, RXDC) between the DTV tuner and IC7207 (Main Ucom)			
Green 13	SD13	ASIC power supply (DC-DC)	AV BOARD Assy	Defective DC-DC converter	AV REG BLOCK	U8502	Check if 3.3 V and 1.5 V are activated.
			MAIN BOARD Assy	Defective RST IC	MAIN UCOM BLOCK	IC7206, IC7210	
			MR POWER SUPPLY Assy	No startup of 12 V			
Green 14	SD14	Communication failure	AV BOARD Assy	Failure in EEPROM or defective peripheral circuits	UIF UCOM BLOCK	IC8705	
			MAIN BOARD Assy or AV BOARD Assy	Disconnection of cable	CN7454(M1) - CN8651(AV1)		Check if the cable is disconnected or not securely connected.
				Failure in communication (SCL_EP2/SDA_EP2) between the IC8705(EEPROM) and IC7207 (Main Ucom)			

• Block diagram of the power-down signal system



• Power-down diagnosis (defective points)

	PD Circuit in operation	Defective Assy	Reason for Power-down	Point to be Checked	Possible Defective Part	Remarks
1	MR POWER	MR POWER SUPPLY Unit				
2	POWER	PANEL POWER SUPPLY Unit				If the elapsed time from relay-on until the LED in the PANEL power supply unit lights is about 2-4 seconds, the defective assembly may be the X or Y DRIVE.
		43 (50) X DRIVE Assy	VSUS UVP	X SUS BLOCK	IC1203, IC1207 (mask module)	
		43 (50) Y DRIVE Assy	VSUS UVP	Y SUS BLOCK	IC2303, IC2307 (mask module)	
3	SCAN	43 (50) SCAN A, B Assy or Y 43 (50) DRIVE Assy	VH UVP	SCAN IC	SCAN IC	
			VH UVP	VH DC/DC	IC2401, IC2402, IC2410, L2401	
			VH OVP	VH DC/DC	IC2402, IC2410	
			Disconnection of cable detected	CN2001, CN2301		
4	SCN-5V	43 (50) SCAN A, B Assy or Y 43 (50) DRIVE Assy	Disconnection of cable detected	CN2101, CN2102, CN2301		
			IC5V UVP	SCAN IC, IC5V DC/DC Y SUS BLOCK	SCAN IC, Q2401, Q2402, IC2304,	
			IC5V OVP	IC5V DC/DC	IC2403, IC2411	
5	Y-DRIVE	43 (50) Y DRIVE Assy	+16.5V OCP	Y SUS BLOCK	IC2303, IC2307 (mask module), IC2301, IC2304, IC2305, R2332	
6	Y-DCDC	43 (50) Y DRIVE Assy	VOFS UVP	VOFS DC/DC	IC2404, IC2412, Q2404, Q2407, Q2312	
			VOFS OVP	VOFS DC/DC	IC2404, IC2412	
7	Y-SUS	43 (50) Y DRIVE Assy	Power-down caused by detection of middle-point voltage	Y RESONANCE BLOCK	Q2202, Q2203, Q2214, Q2205, Q2206, Q2208, Q2209, Q2212, IC2201, IC2202, D2201, D2206, D2220, D2211, D2225, D2230, Control signal series resistors	
8	ADRS	43 (50) ADDRESS Assy	Disconnection of cable detected	CN1501		
			Power-down caused by detection of a power surge	ADR RESONANCE BLOCK	R1631, Q1601, D1602	
9	X-DRIVE	43 (50) X DRIVE Assy	Disconnection of cable detected	CN1001, CN1201		
			+16.5V OCP	X SUS BLOCK	IC1203, IC1207 (mask module), IC1204, IC1206, R1230, IC1205	
			VRN OCP	X SUS BLOCK	Q1205, R1226, R1251	
10	X-DCDC	43 (50) X DRIVE Assy	VRN OVP	VRN DC/DC	IC1403, IC1404	
			VRN UVP	VRN DC/DC	IC1402, IC1403, IC1404	
				X SUS BLOCK	Q1205, R1226, R1251	
11	X-SUS	43 (50) X DRIVE Assy	Power-down caused by detection of middle-point voltage	X RESONANCE BLOCK	Q1102, Q1103, Q1114, Q1105, Q1108, Q1109, Q1111, Q1112, IC1101, IC1102, D1103, D1113, D1118, D1125, D1129, D1130, Control signal series resistors	
12	DIG-DCDC	DIGITAL VIDEO Assy	DCDC +3.3V, +1.5V OVP	DC DC CONVERTER BLOCK	U5602 (DC DC CONVERTER Module)	
13	IC4	DIGITAL VIDEO Assy	IC4 Drive STOP	IC4 BLOCK	IC5401	

OVP: **O**ver **V**oltage **P**rotection UVP: **U**nder **V**oltage **P**rotection OCP: **O**ver **C**urrent **P**rotection

7.1.3 TEMPERATURE-COMPENSATION FUNCTION OF THE DRIVE-SYSTEM VOLTAGE

Function: To control the DRIVE-system voltage according to the temperature (Temperature compensation functions such that the voltage is lowered on the lower-temperature side and the voltage becomes higher on the higher-temperature side.)

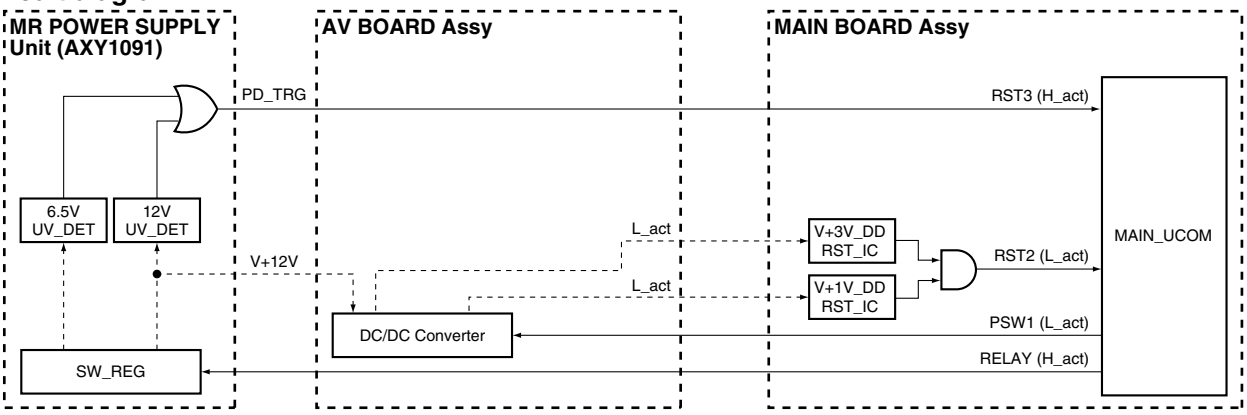
Purpose: For improving the yield by compensating for the temperature characteristics of the panel

Note: Temperature compensation is performed only for the VSUS voltage, and not for the VOFS voltage. This compensation is controlled by the software.

7.1.4 PROCESSING IN ABNORMALITY

MR Power supply and DC-DC converter

● **Circuit diagram**

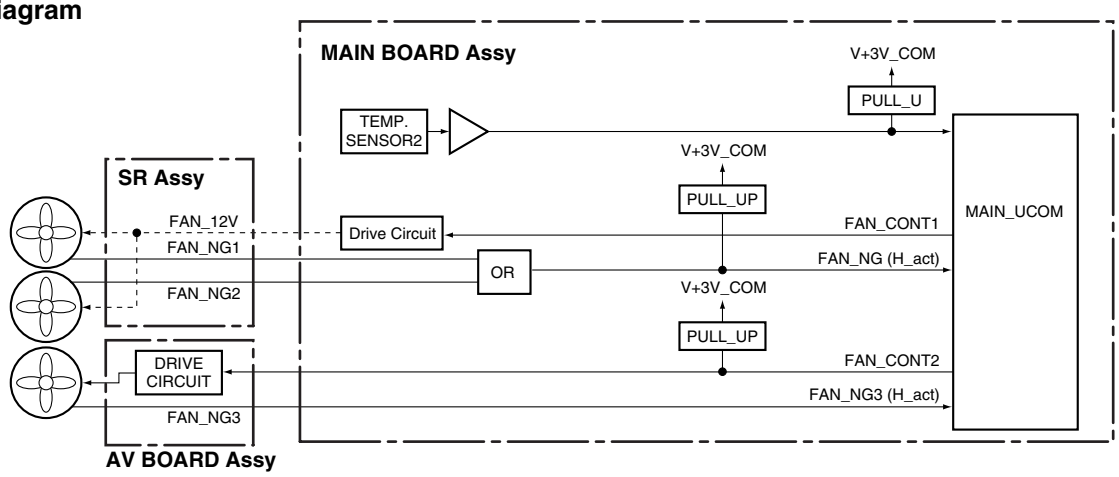


● **Specifications for port monitoring**

Port Name	SD/PD Indication	Assigned Pin	Active
PD_MAIN (PD_TRG)	MR_PWR	41	Power-down with H
RST2	ASIC power supply	98	Shutdown with L

Fan and temperature sensor 2

● **Circuit diagram**

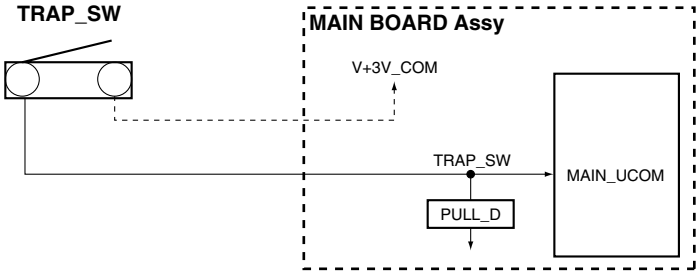


● **Specifications for port monitoring**

Port Name	SD/PD Indication	Assigned Pin	Active
FAN_NG	FAN	31	Shutdown with H
FAN_NG 3	FAN	32	Shutdown with H
TEMP2	Abnormally high temperature	50	Shutdown when the value exceeds the predetermined value

TRAP_SW

● **Circuit diagram**



● **Specifications for port monitoring**

Port Name	SD/PD Indication	Assigned Pin	Active
TRAP_SW	Modification tried	30	OFF with L

7.1.5 POWER ON/OFF FUNCTION FOR THE LARGE-SIGNAL SYSTEM

Function: Only the power for the low voltage lines (16 V, 12 V, and 6.5 V) is on, and the power for the high voltage lines (VSUS, VADR) is off.

Usage: 1. Use when only an operational check for the low voltage lines is required, such as when making repairs.
2. Use when rewriting of a program for each microcomputer is required.

Methods: 1 Set the slide switch (S5201) on the DIGITAL VIDEO Assy to its upper position (See Fig. below).
2. Send the "DRF" RS-232C command to turn the large-signal system off.
3. Send the "DRN" RS-232C command to turn the large-signal system on.

Notes:

- As the unit enters Power-Down and Muting On mode when Methods 1 and 2 are performed, and power-downs other than those caused by the power (PS_PD) and DC-DC-converter (DIGITAL_DC-DC) circuits are not activated.
- If the slide switch is set from OFF to ON while the power is on, a power-down will occur. Be sure to turn the power off before switching the slide switch.
- When using the RS-232C commands, as with the slide switch, do not use the "DRN" command (DRIVE ON) while the power is on, although doing so will not cause a power-down.
- Although the "DRF" RS-232C command is enabled during Standby, if the power is turned on then turned off, the unit will return to "DRN" mode.

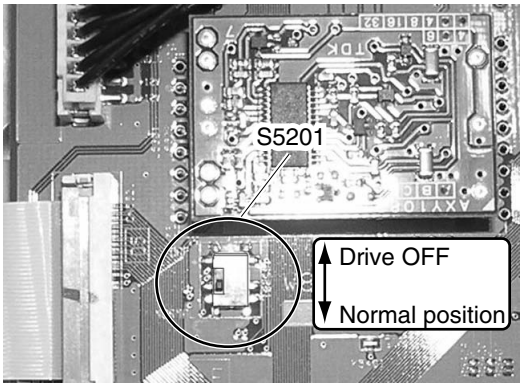


Fig. Drive OFF switch

7.1.6 BACKUP WHEN THE MAIN UNIT IS ADJUSTED

■ Outline

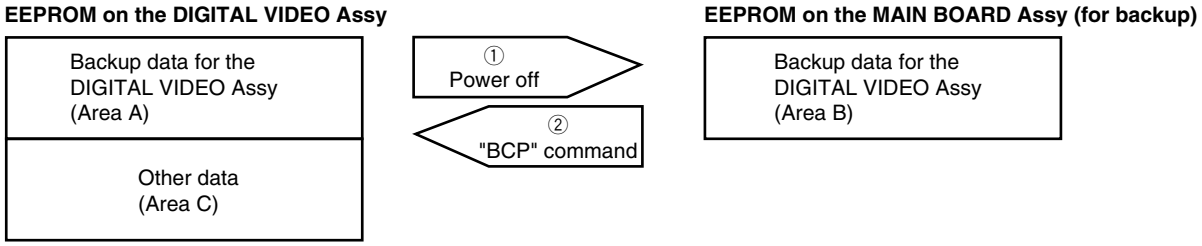
The data on the adjustment values for the main unit are stored in an EEPROM (IC5206, 4 kbits) on the DIGITAL VIDEO Assy. Part of the data (area A in the figure below) are automatically copied to an EEPROM (IC7405, 2 kbits) mounted on the MAIN BOARD Assy for backup. When the DIGITAL VIDEO Assy is replaced, the backup data on the adjustment values for the main unit stored in the MAIN BOARD Assy can be copied to the new DIGITAL VIDEO Assy, thus enabling you to omit newly performing adjustments on the main unit. The logs for the product (power-down log, etc.) can also be copied.

■ Data to be backed up in the digital EEPROM (area A)

- Margin adjustment values (Vsus, Vofset)
- Power upper-limit adjustment value (ABL)
- PANEL white-balance adjustment values
  (PANEL-R HIGH, PANEL-G HIGH, PANEL-B HIGH, PANEL-R LOW, PANEL-G LOW, PANEL-B LOW)
- Drive waveform adjustment values
  (X-SUS-U1, X-SUS-U2, X-SUS-D1, X-SUS-D2, Y-SUS-U1, Y-SUS-U2, Y-SUS-D1, Y-SUS-D2, Y-SUS-D3, Y-SUS-D4)
- Hour meter
- Pulse meter
- Serial Number
- Number of times the power has been turned on
- PD/SD logs

■ Basic flow of automatic backup

Using a keyword, the data in areas A and B are judged as to whether they have been adjusted or not, then copying is performed.


EEPROM on the DIGITAL VIDEO Assy
Backup data for the DIGITAL VIDEO Assy (Area A)
Other data (Area C)
① Power off
② "BCP" command
EEPROM on the MAIN BOARD Assy (for backup)
Backup data for the DIGITAL VIDEO Assy (Area B)

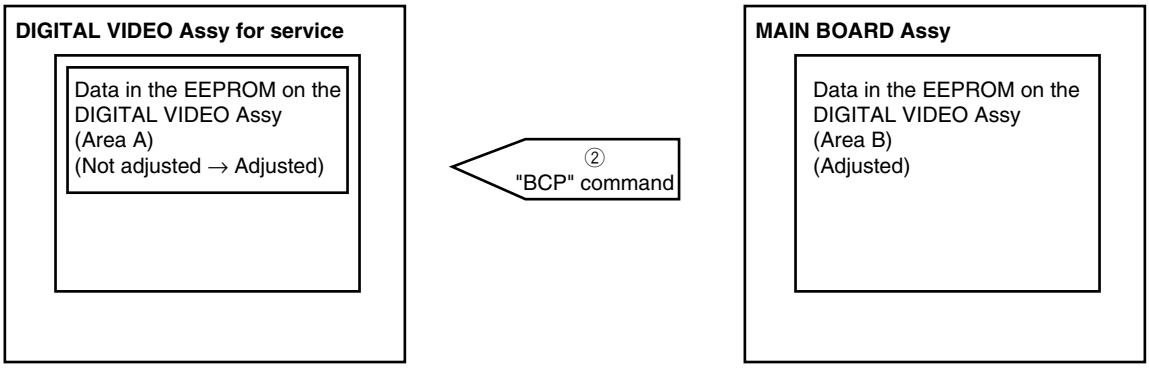
① The keyword on the DIGITAL VIDEO Assy is checked when the power is turned off, and if it is "adjusted", automatic backup is performed.
② If the keyword on the MAIN BOARD Assy (Area B) is "adjusted," copying can be performed with the "BCP" RS-232C command.

■ Actual automatic backup operations by RS-232C command

1. When the DIGITAL VIDEO Assy is replaced with a new DIGITAL VIDEO Assy for service

Changing of keywords is not required. Replace the DIGITAL VIDEO Assy with an Assy for service, and send the "BCP" RS-232C command. Thus, the backup data in the EEPROM on the MAIN BOARD Assy are copied to the EEPROM on the DIGITAL VIDEO Assy for service.

Note: To remind you to send the "BCP" command after replacing the DIGITAL VIDEO Assy with one for service, a warning by the LEDs (the red LED lit and the green LED flashing at intervals of 200 ms) is indicated until the "BCP" command is issued.


DIGITAL VIDEO Assy for service
Data in the EEPROM on the DIGITAL VIDEO Assy (Area A) (Not adjusted → Adjusted)
② "BCP" command
MAIN BOARD Assy
Data in the EEPROM on the DIGITAL VIDEO Assy (Area B) (Adjusted)

2. When a repaired DIGITAL VIDEO Assy is mounted on another unit (reuse of the repaired DIGITAL VIDEO Assy)

The keyword of the DIGITAL VIDEO Assy to be reused must be changed to "not adjusted" using the "UAJ" RS-232C command.

Note 1: If a repaired DIGITAL VIDEO Assy is mounted in another unit (Unit 2) without this change of keyword, and the power to the unit 2 is turned off, the data in force before the repair of the DIGITAL VIDEO Assy will be copied to Area B of the MAIN BOARD Assy of Unit 2, overwriting the data necessary for Unit 2. Once overwritten, the original data will not be restored.

3. When a repaired DIGITAL VIDEO Assy is mounted on the original unit (reuse of the repaired DIGITAL VIDEO Assy)
Changing of keywords is not required. After the repaired DIGITAL VIDEO Assy is mounted in the original unit, the unit can operate with its latest adjustment values.

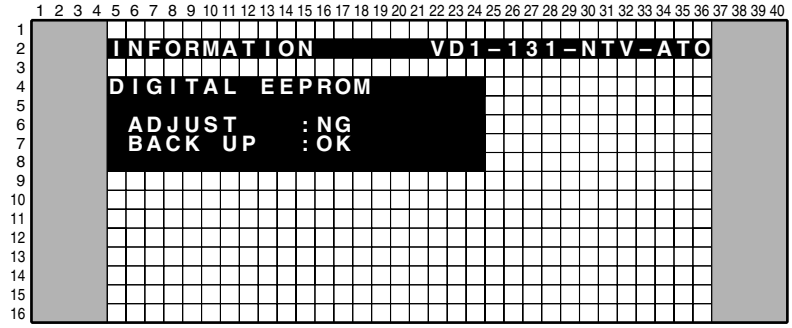
4. When both the DIGITAL VIDEO Assy and MAIN BOARD Assy are simultaneously replaced with other assemblies
The automatic backup function of this unit will not work properly.

Note 2: Readjustment of the main unit is required.
Note 3: After readjustment of the main unit, send the "FAJ" RS-232C command to change the keyword of the DIGITAL VIDEO Assy to "adjusted." Thus, when the unit is turned off, automatic backup of adjustment data is performed properly.
Note 4: If readjustment of the main unit is totally impossible, it can be omitted by installing the EEPROM (IC5206, 4 kbits) originally mounted on the DIGITAL VIDEO Assy for service.

■ Automatic backup operations in Service/Factory mode

[Status confirmation]

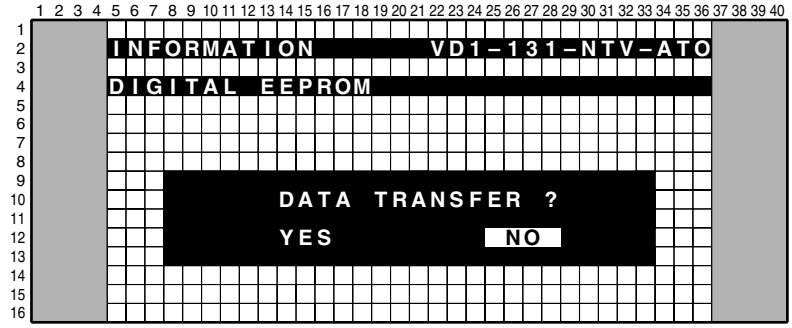
Display the screen page shown below to check if the DIGITAL VIDEO Assy has been adjusted or a new service part might have been installed without adjustment being performed, and if the adjustment values have been stored in the backup ROM.
If the DIGITAL VIDEO Assy has not been adjusted (NG), the red LED lights, and the green LED flashes at intervals of 200 ms. In such a case, be sure to download the data from the backup ROM.



[Downloading the adjustment data from the backup ROM] (Required after the DIGITAL VIDEO Assy is replaced)

After the DIGITAL VIDEO Assy is replaced, enter Service/Factory mode to copy the data from the backup ROM. Display the screen page shown above after entering Service/Factory mode then press the Enter key. The indication below is displayed. Move the cursor to YES then press the Enter key to start copying the data from the backup ROM to the new DIGITAL VIDEO Assy.

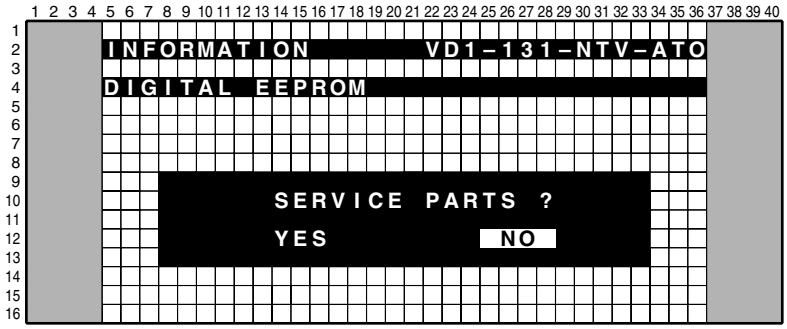
Note: Be sure to perform this operation when the DIGITAL VIDEO Assy is replaced with a new service part.



[Clearing the data in the ROM of the DIGITAL VIDEO Assy]

After either YES or NO is selected on the display shown above, the indication shown below is automatically displayed. Move the cursor to YES then press the Enter key. The data in the ROM of the DIGITAL VIDEO Assy become those for a service part (not adjusted).

Notes: • Use this operation after the DIGITAL VIDEO Assy in failure is repaired and is to be reused as a service part.
• In normal replacement of the Assy with a new service part, this operation is not required. Select NO after replacement with a service part.



When either YES or NO is selected on the above display, the display will automatically return to that for status confirmation shown above.

■ Miscellaneous

If the white balance (W/B) value is largely shifted because of aging, etc., W/B adjustment is required. (As this may be a rare case, the adjustment procedures are described below, just for your reference.)

[W/B-adjustment procedures]

The W/B adjustment can be performed with the RS-232C commands. The Minolta CA-100 color difference meter is required.

① Set the keyword for the DIGITAL VIDEO Assy to "not adjusted" with the "UAJ" RS-232C command.

② Obtain the current adjustment values in the two adjustment tables (see "6.7 List of RS-232C commands").
• Shifting to Table 1: Send the "MSK S51" and "F60" commands. Obtaining the adjustment values: Send the "GPW" command.

③ Make settings for various functions.
Send the "PPN," "SDN," "SPN," and "WAY" commands.
Note: After adjustment, when the POWER switch is set to OFF, these settings will be reset to the initial values.

④ For each table, set the brightness.
• Adjustment in Table 1: After sending the "F60" command, perform adjustment.
For each table, change the RGB parameters so that the values measured using a Minolta color difference meter (CA-100) become as indicated below. In this case, any one of PRH, PGH, or PBH must be set to 256.

	Right side of Mask H
x	285
y	289

"PRH***" : 000 - 511
"PGH***" : 000 - 511
"PBH***" : 000 - 511

⑤ Check after adjustment
• Shifting to Table 1: Send the "F60" command. Obtaining the adjustment values: Send the "GPW" command.
Check that the adjustment data have been changed.

⑥ Change the keyword for the DIGITAL VIDEO Assy to "adjusted" by sending the "FAJ" RS-232C command.

Note: Use a Minolta CA-100 color difference meter or the equivalent for measurement. Otherwise, the specifications of the product cannot be assured.

Note: To cancel adjusted data and return to the values before adjustment, send the "BCP" RS-232C command. Turn the AC power off then turn it back on before setting the unit to Standby OFF. The backup values are then retrieved.

[Diagnosis of abnormalities other than shutdown and power-down]

Symptom	Defective Assy	Possible Cause	Check Point	Possible Defective Part	Remarks
No power (both red and green LEDs unlit)		Cable disconnection	CN4204		Check if the connection between the PANEL POWER SUPPLY and DIGITAL VIDEO assemblies is properly made.
While the red LED remains lit, the green LED begins flashing (200 ms).		No backup copy			The backup copy process was not performed when the Digital Assy was replaced. (See "7.1.6 Backup when the main unit is adjusted".)
Key input not effective		Cable disconnection	CN4801 - CN4851	ADD1225	Check if the FPCs are properly connected. Check if imparting vibration to the unit affects key inputs. Check if a pulse is output when the key corresponding to Pin 2 of the CN4852 is pressed.
		Cable disconnection	CN4852 - CN8656		Check if the cables are disconnected or not securely connected. Check if a pulse is output when the key corresponding to Pin 6 of the CN8656 is pressed.
	KEY CONTROL	Defective KEY SCAN IC	KEY CONTROL Assy	IC4851	Check if a pulse is output when the key corresponding to Pin 2 of the CN4852 is pressed.
Remote control unit not effective		Cable disconnection	CN4901 - CN8656		Check if the cables are not connected or securely connected.
	PANEL IR	Defective infrared receiver	PANEL IR	U4901	Check if a pulse is output when the key corresponding to Pin 3 of the CN4901 is pressed.
Abnormality in a one-eighth area of the screen	DIGITAL VIDEO	Defective IC4	IC4 BLOCK	IC5401	Check if an abnormal area in the screen changes when the FPC connected to the address corresponding to the abnormal area is replaced with the one corresponding to the next address.
	ADDRESS				Check that an abnormal area in the screen does not change when the FPC connected to the address corresponding to the abnormal area is replaced with the one corresponding to the next address.
Both red and green/orange LEDs unlit		Cable disconnection	CN9461 - CN8656		Check if the cables are not connected or securely connected.

● Image for the composite or S signal is not displayed

If no picture is displayed, press the POWER button to turn the power off then back on after a while.
When the red LED is flashing, the power has been Power down. Check how many times the LED is flashing.
(See the Power-down diagnosis on page 134.)
When the green LED is lit, follow the procedures below:

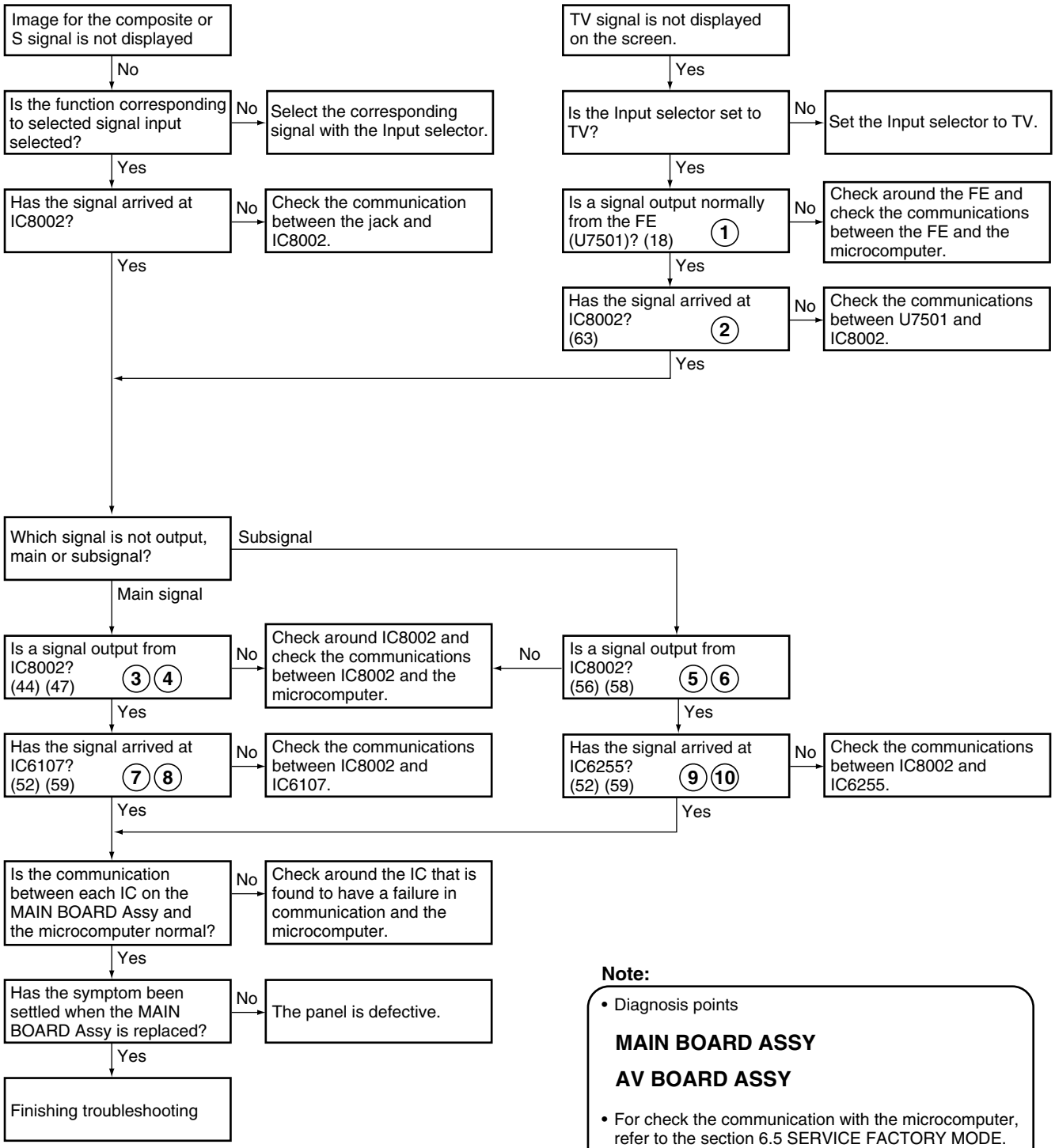


Image for the composite or S signal is not displayed
No
Is the function corresponding to selected signal input selected?
No
Select the corresponding signal with the Input selector.
Yes
Has the signal arrived at IC8002?
No
Check the communication between the jack and IC8002.
Yes
TV signal is not displayed on the screen.
Yes
Is the Input selector set to TV?
No
Set the Input selector to TV.
Yes
Is a signal output normally from the FE (U7501)? (18) 1
No
Check around the FE and check the communications between the FE and the microcomputer.
Yes
Has the signal arrived at IC8002? (63) 2
No
Check the communications between U7501 and IC8002.
Yes
Which signal is not output, main or subsignal?
Subsignal
Main signal
Is a signal output from IC8002? (44) (47) 3 4
No
Check around IC8002 and check the communications between IC8002 and the microcomputer.
No
Is a signal output from IC8002? (56) (58) 5 6
Yes
Has the signal arrived at IC6107? (52) (59) 7 8
No
Check the communications between IC8002 and IC6107.
Yes
Has the signal arrived at IC6255? (52) (59) 9 10
No
Check the communications between IC8002 and IC6255.
Yes
Is the communication between each IC on the MAIN BOARD Assy and the microcomputer normal?
No
Check around the IC that is found to have a failure in communication and the microcomputer.
Yes
Has the symptom been settled when the MAIN BOARD Assy is replaced?
No
The panel is defective.
Yes
Finishing troubleshooting

Note:

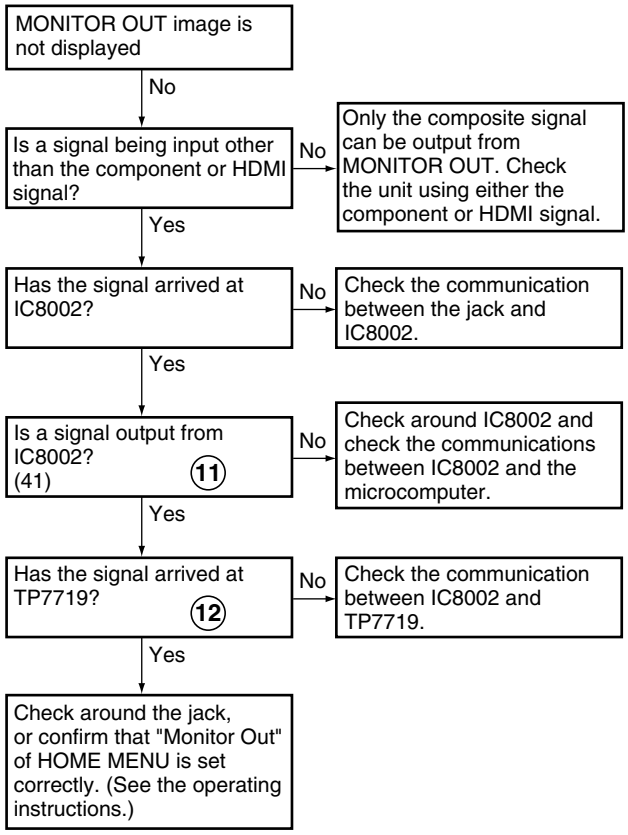
- Diagnosis points

  MAIN BOARD ASSY

  AV BOARD ASSY

- For check the communication with the microcomputer, refer to the section 6.5 SERVICE FACTORY MODE.
- The encircled numbers denote measuring point in the Waveforms for Troubleshooting.

● MONITOR OUT image is not displayed


MONITOR OUT image is not displayed
No
Is a signal being input other than the component or HDMI signal?
No
Only the composite signal can be output from MONITOR OUT. Check the unit using either the component or HDMI signal.
Yes
Has the signal arrived at IC8002?
No
Check the communication between the jack and IC8002.
Yes
Is a signal output from IC8002? (41)
11
No
Check around IC8002 and check the communications between IC8002 and the microcomputer.
Yes
Has the signal arrived at TP7719?
12
No
Check the communication between IC8002 and TP7719.
Yes
Check around the jack, or confirm that "Monitor Out" of HOME MENU is set correctly. (See the operating instructions.)

● Image for the component signal is not displayed

If no picture is displayed, press the POWER button to turn the power off then back on after a while.
When the red LED is flashing, the power has been Power down. Check how many times the LED is flashing.
(See the Power-down diagnosis on page 134.)
When the green LED is lit, follow the procedures below:

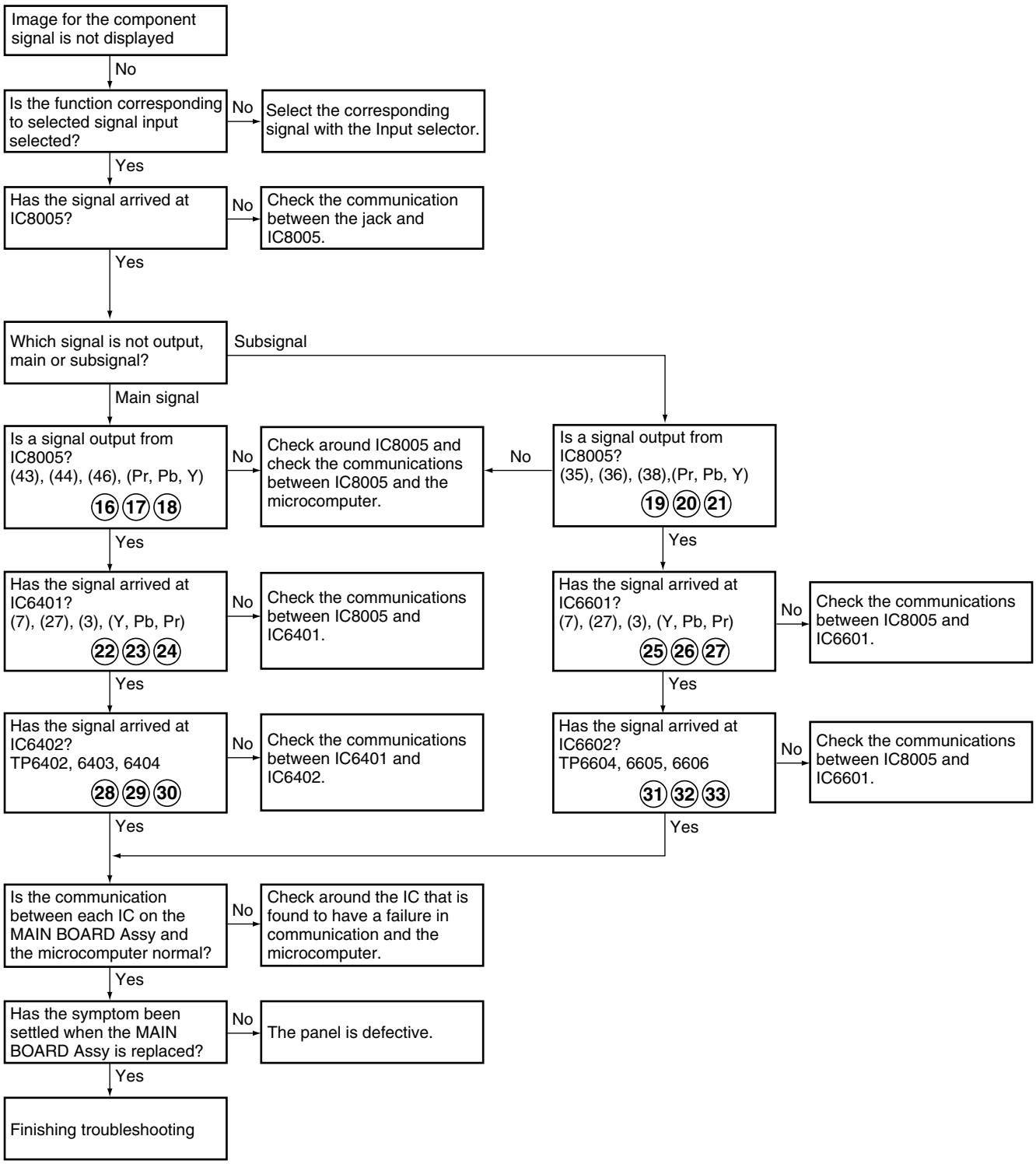
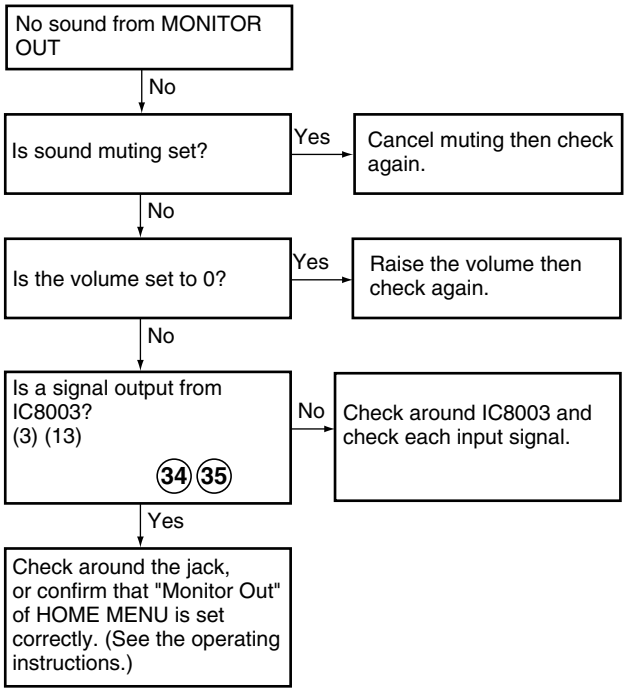
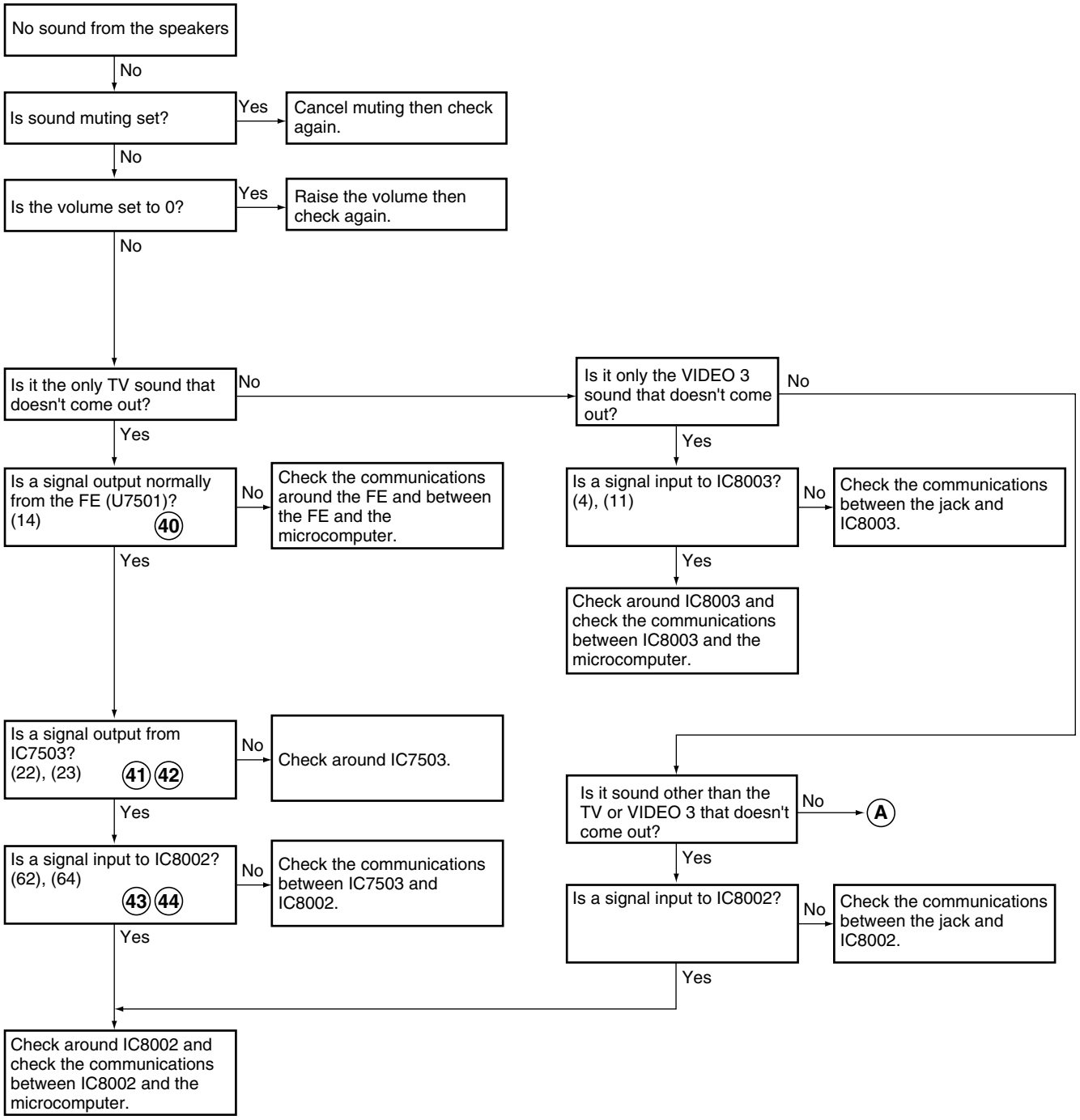


Image for the component signal is not displayed
No
Is the function corresponding to selected signal input selected?
No
Select the corresponding signal with the Input selector.
Yes
Has the signal arrived at IC8005?
No
Check the communication between the jack and IC8005.
Yes
Which signal is not output, main or subsignal?
Subsignal
Main signal
Is a signal output from IC8005?
(43), (44), (46), (Pr, Pb, Y)
16 17 18
No
Check around IC8005 and check the communications between IC8005 and the microcomputer.
No
Is a signal output from IC8005?
(35), (36), (38),(Pr, Pb, Y)
19 20 21
Yes
Yes
Has the signal arrived at IC6401?
(7), (27), (3), (Y, Pb, Pr)
22 23 24
No
Check the communications between IC8005 and IC6401.
Has the signal arrived at IC6601?
(7), (27), (3), (Y, Pb, Pr)
25 26 27
No
Check the communications between IC8005 and IC6601.
Yes
Yes
Has the signal arrived at IC6402?
TP6402, 6403, 6404
28 29 30
No
Check the communications between IC6401 and IC6402.
Has the signal arrived at IC6602?
TP6604, 6605, 6606
31 32 33
No
Check the communications between IC8005 and IC6601.
Yes
Yes
Is the communication between each IC on the MAIN BOARD Assy and the microcomputer normal?
No
Check around the IC that is found to have a failure in communication and the microcomputer.
Yes
Has the symptom been settled when the MAIN BOARD Assy is replaced?
No
The panel is defective.
Yes
Finishing troubleshooting

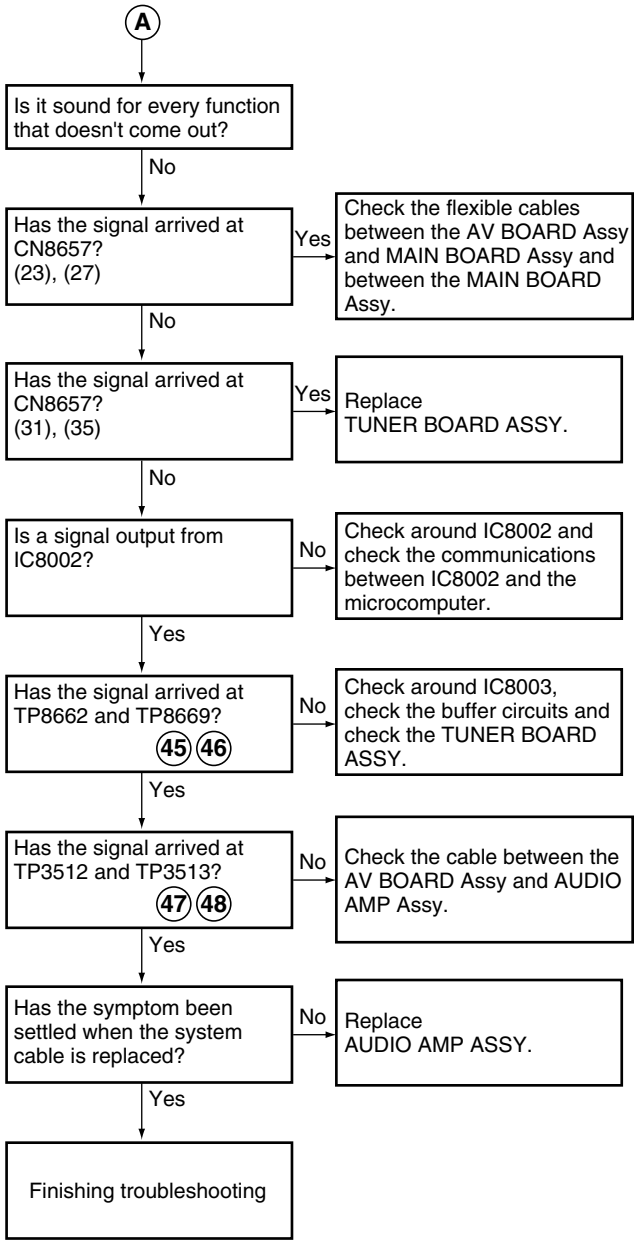
● No sound from MONITOR OUT


No sound from MONITOR OUT
No
Is sound muting set?
Yes
Cancel muting then check again.
No
Is the volume set to 0?
Yes
Raise the volume then check again.
No
Is a signal output from IC8003?
(3) (13)
34 35
No
Check around IC8003 and check each input signal.
Yes
Check around the jack, or confirm that "Monitor Out" of HOME MENU is set correctly. (See the operating instructions.)

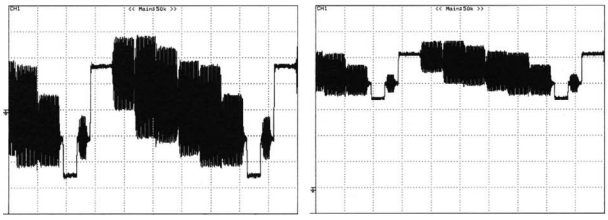
● No sound from the speakers (1/2)


No sound from the speakers
No
Is sound muting set?
Yes
Cancel muting then check again.
No
Is the volume set to 0?
Yes
Raise the volume then check again.
No
Is it the only TV sound that doesn't come out?
No
Is it only the VIDEO 3 sound that doesn't come out?
No
Yes
Yes
Is a signal output normally from the FE (U7501)? (14) 40
No
Check the communications around the FE and between the FE and the microcomputer.
Is a signal input to IC8003? (4), (11)
No
Check the communications between the jack and IC8003.
Yes
Yes
Check around IC8003 and check the communications between IC8003 and the microcomputer.
Is a signal output from IC7503? (22), (23) 41 42
No
Check around IC7503.
Is it sound other than the TV or VIDEO 3 that doesn't come out?
No
A
Yes
Yes
Is a signal input to IC8002? (62), (64) 43 44
No
Check the communications between IC7503 and IC8002.
Is a signal input to IC8002?
No
Check the communications between the jack and IC8002.
Yes
Yes
Check around IC8002 and check the communications between IC8002 and the microcomputer.

● No sound from the speakers (2/2)

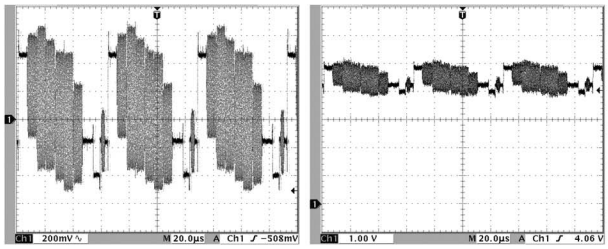

A
Is it sound for every function that doesn't come out?
No
Has the signal arrived at CN8657? (23), (27)
Yes
Check the flexible cables between the AV BOARD Assy and MAIN BOARD Assy and between the MAIN BOARD Assy.
No
Has the signal arrived at CN8657? (31), (35)
Yes
Replace TUNER BOARD ASSY.
No
Is a signal output from IC8002?
No
Check around IC8002 and check the communications between IC8002 and the microcomputer.
Yes
Has the signal arrived at TP8662 and TP8669? 45 46
No
Check around IC8003, check the buffer circuits and check the TUNER BOARD ASSY.
Yes
Has the signal arrived at TP3512 and TP3513? 47 48
No
Check the cable between the AV BOARD Assy and AUDIO AMP Assy.
Yes
Has the symptom been settled when the system cable is replaced?
No
Replace AUDIO AMP ASSY.
Yes
Finishing troubleshooting

1 **U7501 - pin 18**

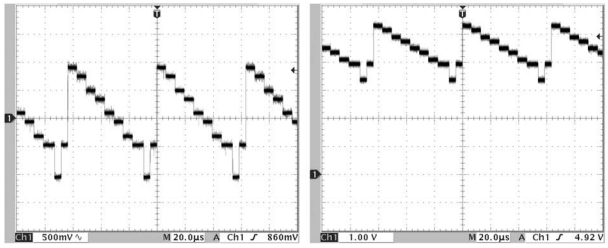


0.2V/div AC 10µs/div 0.5V/div DC 10µs/div

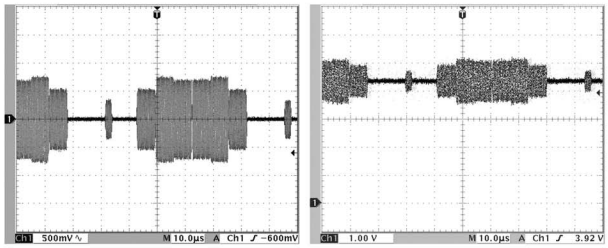
2 **IC8002 - pin 63**



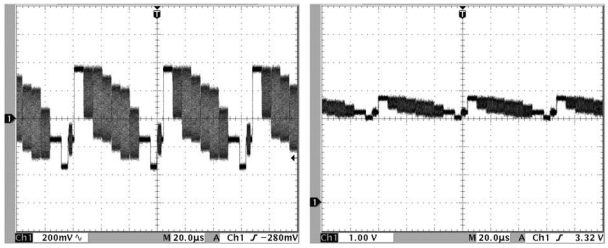
3 **IC8002 - pin 44**



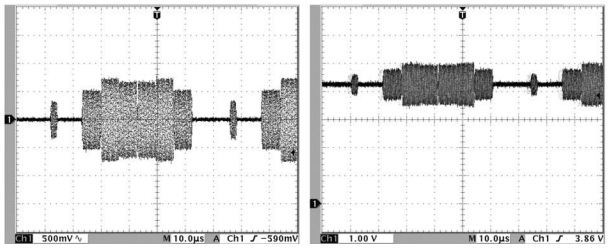
4 **IC8002 - pin 47**



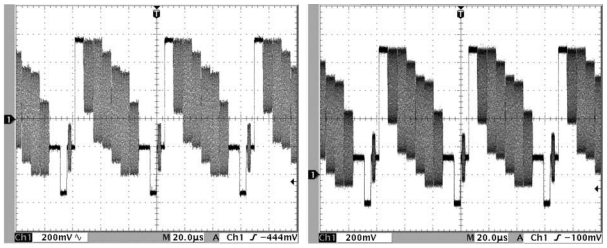
5 **IC8002 - pin 56**



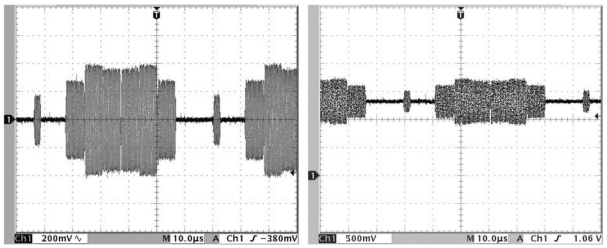
6 **IC8002 - pin 58**



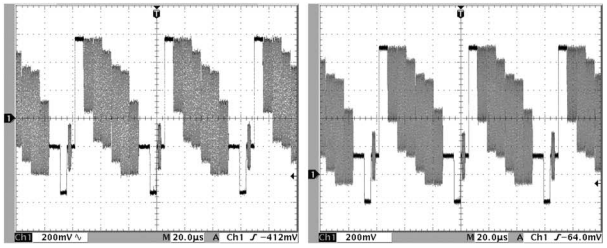
7 **IC6107 - pin 52**



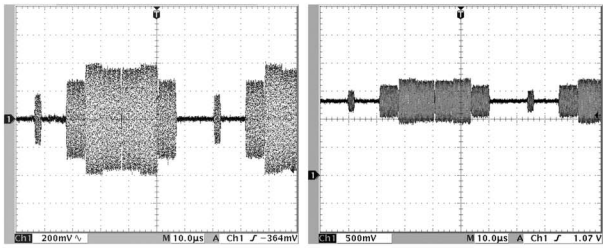
8 **IC6107 - pin 59**



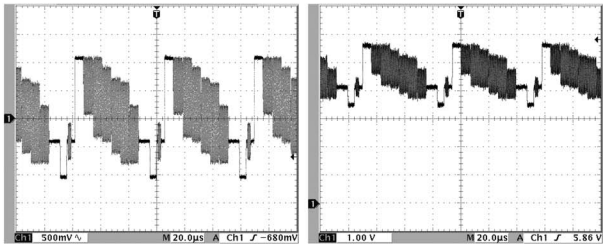
9 **IC6255 - pin 52**



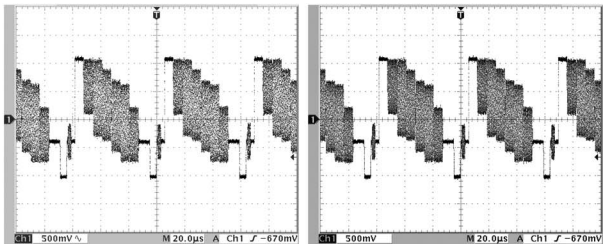
10 **IC6255 - pin 59**



11 **IC8002 - pin 41**



12 **TP7719**



A

B

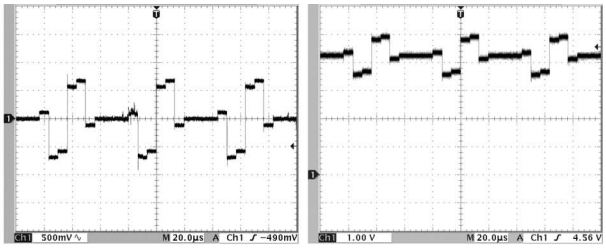
C

D

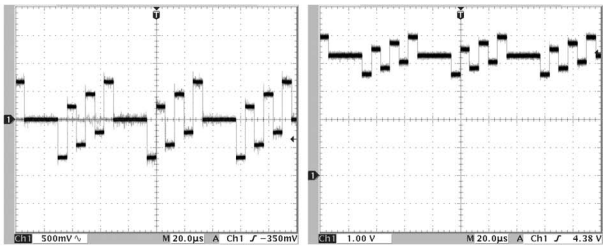
E

F

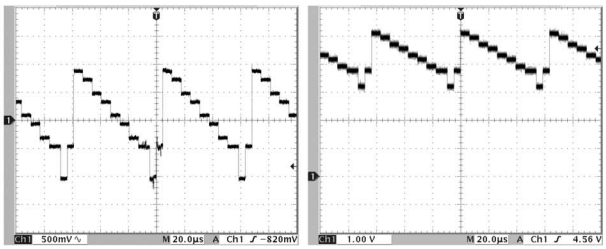
19 **IC8005 - pin 35**



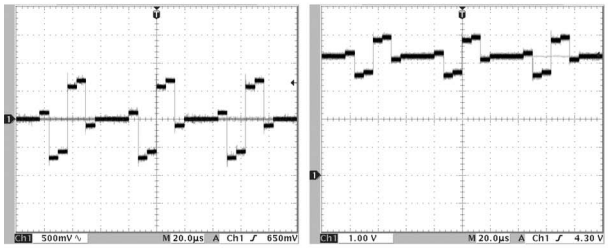
20 **IC8005 - pin 36**



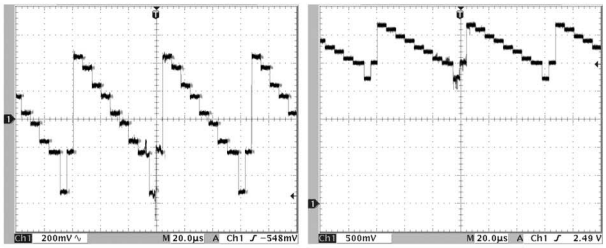
21 **IC8005 - pin 38**



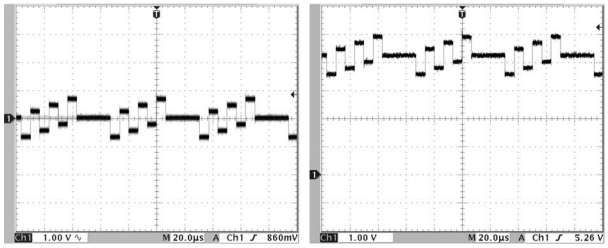
16 **IC8005 - pin 43**



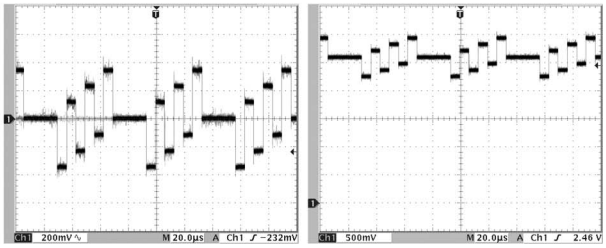
22 **IC6401 - pin 7**



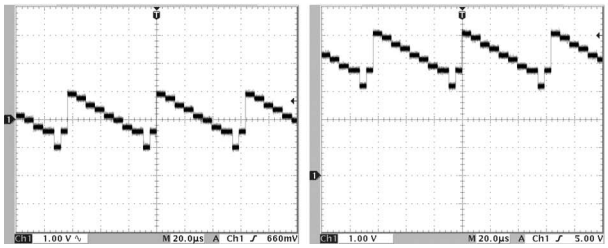
17 **IC8005 - pin 44**



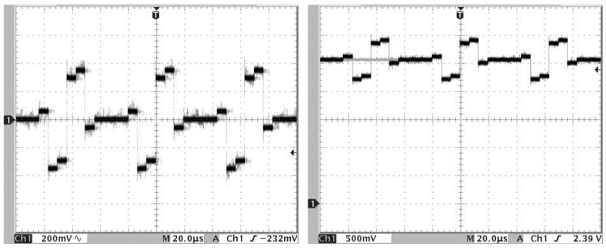
23 **IC6401 - pin 27**



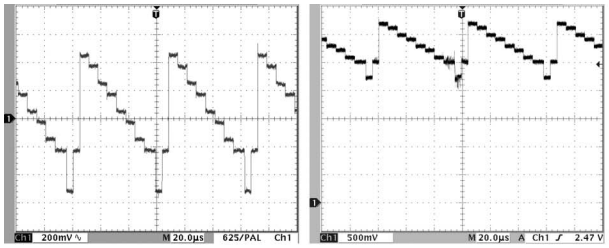
18 **IC8005 - pin 46**



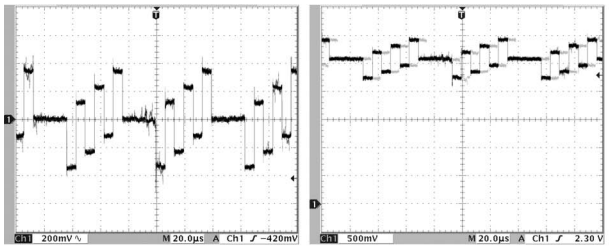
24 **IC6401 - pin 3**



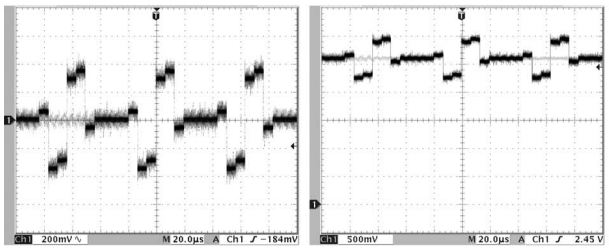
25 **IC6601 - pin 7**



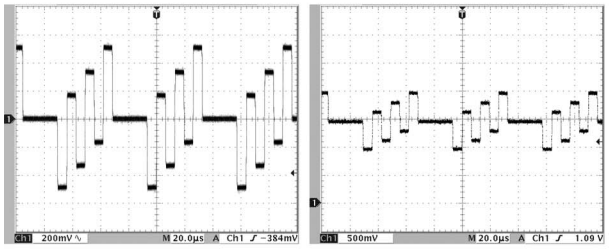
26 **IC6601 - pin 27**



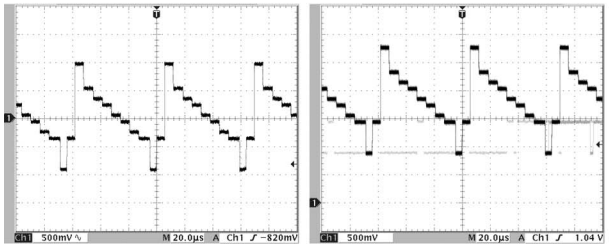
27 **IC6601 - pin 3**



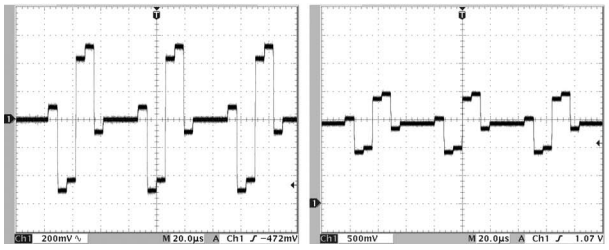
28 **TP6402**



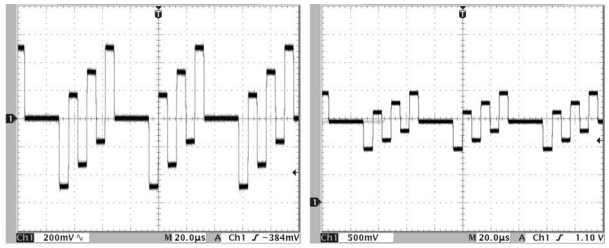
29 **TP6403**



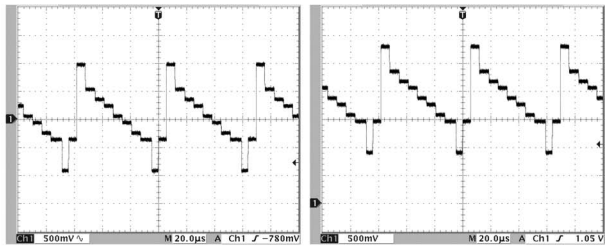
30 **TP6404**



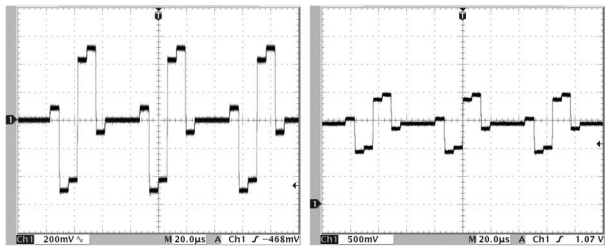
31 **TP6604**



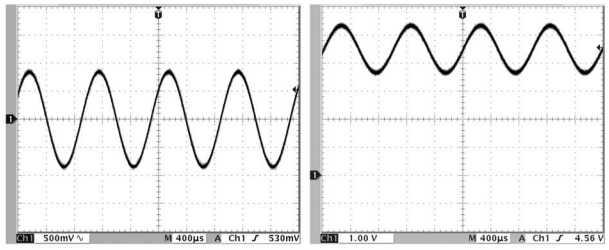
32 **TP6605**



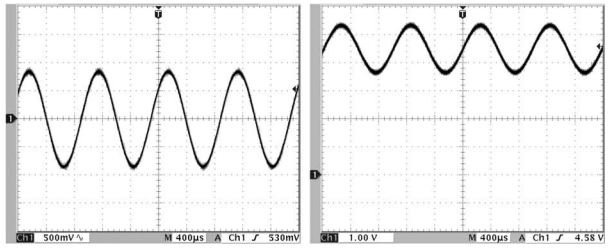
33 **TP6606**



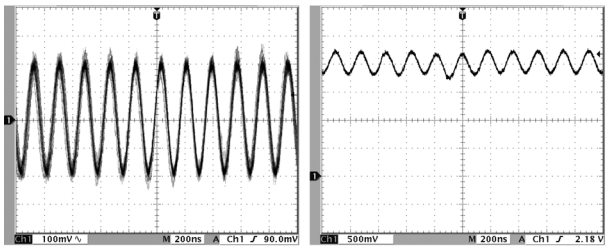
34 **IC8003 - pin 3**



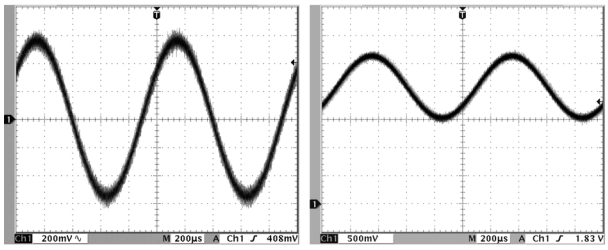
35 **IC8003 - pin 13**



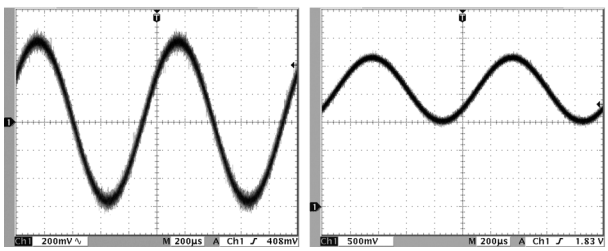
(40) U7501 - pin 14



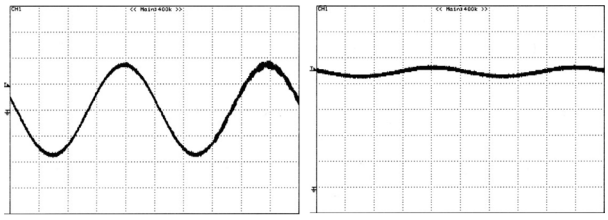
(41) IC7503 - pin 22



(42) IC7503 - pin 23

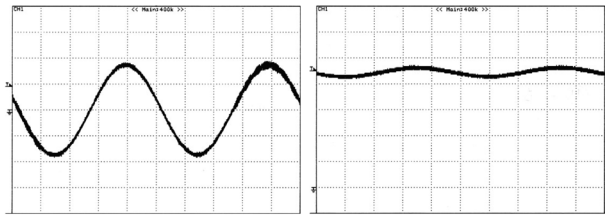


(43) IC8002 - pin 62



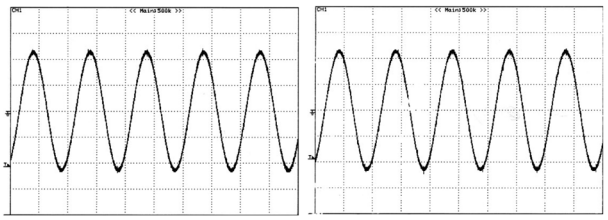
0.1V/div AC 200µs/div 1V/div DC 200µs/div

(44) IC8002 - pin 64



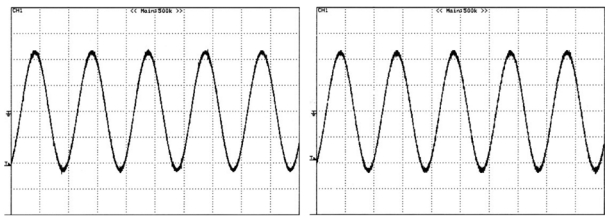
0.1V/div AC 200µs/div 1V/div DC 200µs/div

(45) TP8662



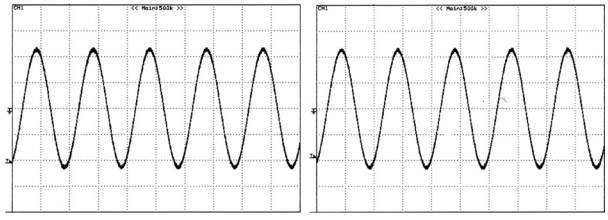
0.2V/div AC 500µs/div 0.2V/div DC 500µs/div

(46) TP8669



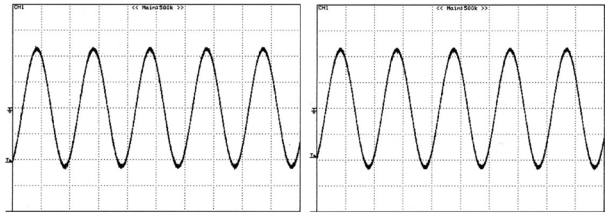
0.2V/div AC 500µs/div 0.2V/div DC 500µs/div

(47) TP3513



0.2V/div AC 500µs/div 0.2V/div DC 500µs/div

(48) TP3512



0.2V/div AC 500µs/div 0.2V/div DC 500µs/div

7.1.8 DISASSEMBLY

Note : Even if the unit shown in the photos and illustrations in this manual may differ from your product, the procedures described here are common.

● PDP-5050SX

1 Rear Section

• Rear Case (5050)

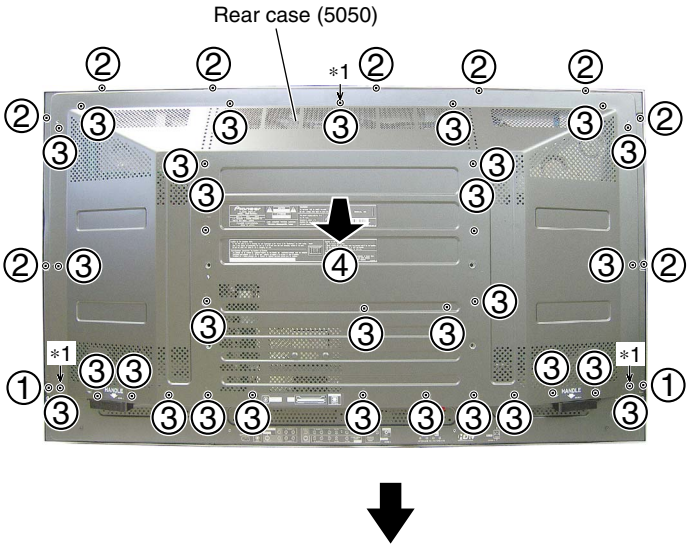
① Remove the screws.

② Remove the nine screws.

③ Remove the 30 screws.

Note ∗1:
When reassembling, first secure the screws for these holes to position the Rear case (5050) correctly.

④ Remove the Rear case (5050).



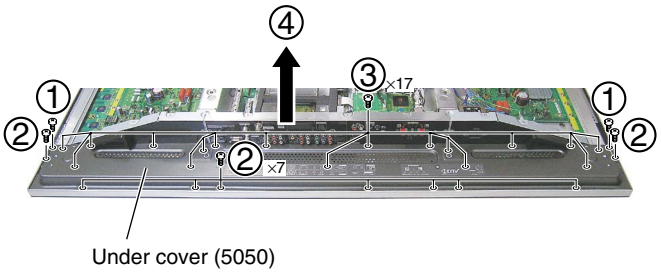
• Under Cover (5050)

① Remove the two screws.

② Remove the nine screws.

③ Remove the 17 screws.

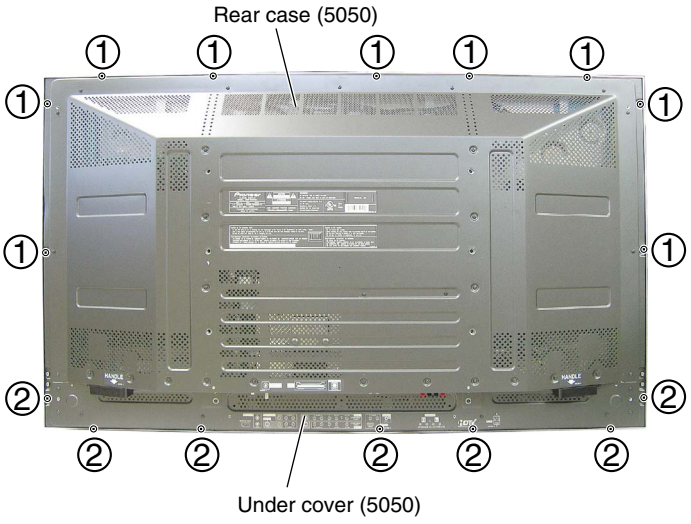
④ Remove the under cover (5050).



Note:
If you wish to remove only the front case Assy (5050), remove it as follows.

① Remove the nine screws.

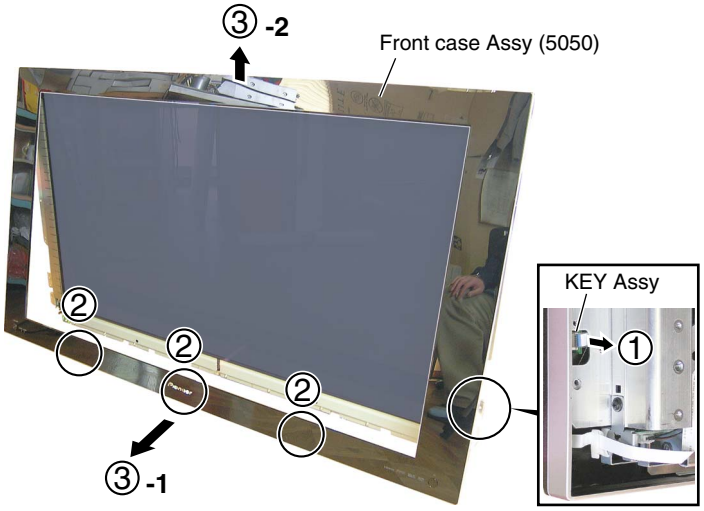
② Remove the seven screws.



2 Front Section

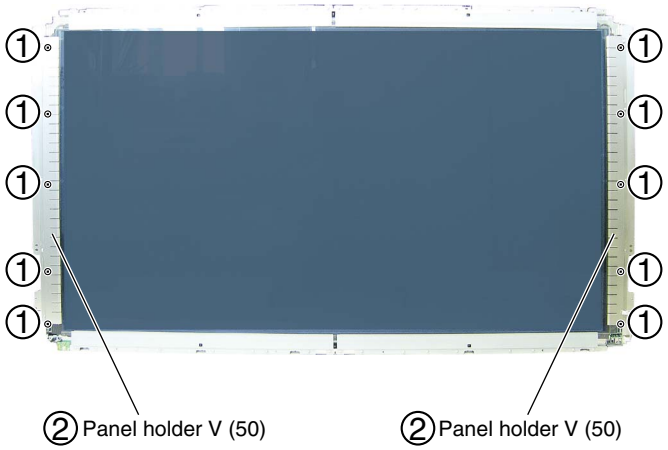
• Front Case Assy (5050)

① Disconnect the flexible cable.
② Unhook the three hooks.
③ Remove the front case Assy (5050).



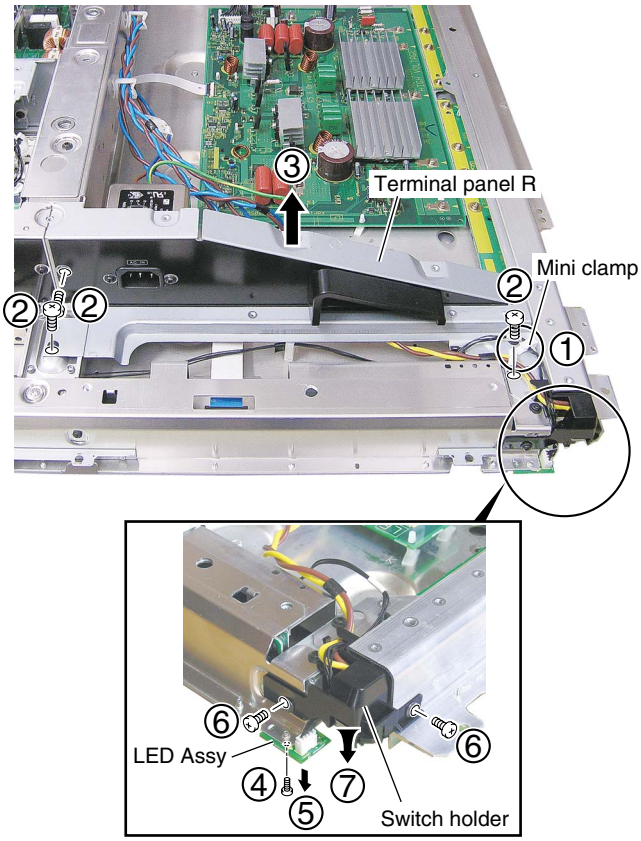
• Panel Holder V (50)

① Remove the ten screws.
② Remove the two panel holder V (50)s.

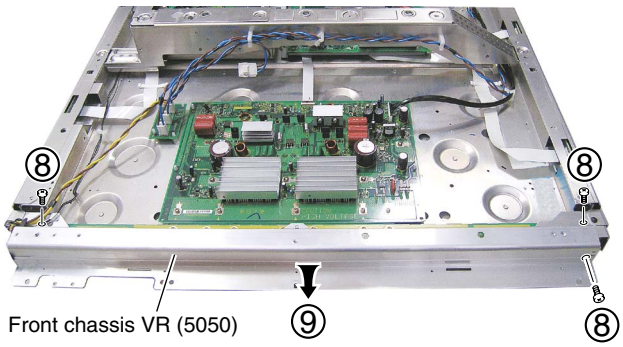


3 X CONNECTOR A and B Assys

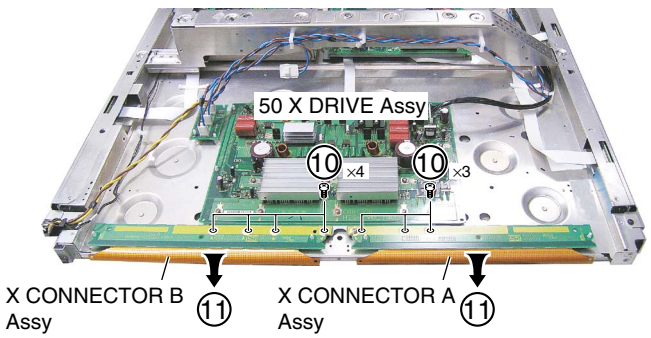
① Remove the jumper wires from the mini clamp.
② Remove the three screws.
③ Remove the Terminal panel R.
④ Remove the one screw.
⑤ Remove the LED Assy.
⑥ Remove the two screws.
⑦ Remove the switch holder.



⑧ Remove the three screws.
⑨ Remove the front chassis VR (5050).

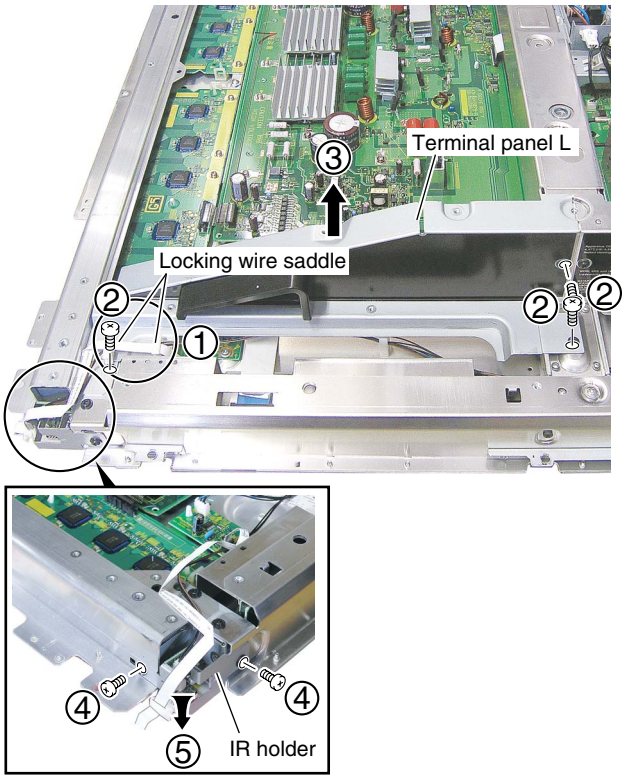


⑩ Remove the seven screws.
⑪ Remove the X CONNECTOR A and B Assys.

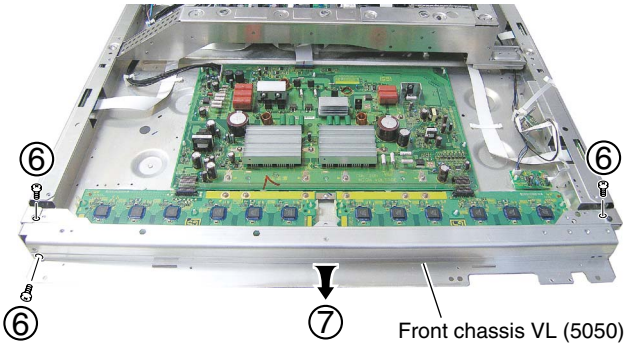


4 50 SCAN A and B Assys

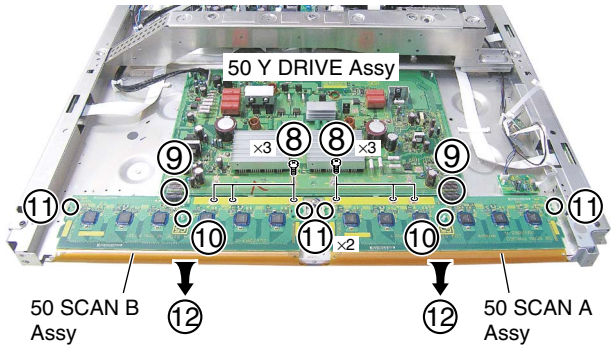
① Remove the flexible cable from the locking wire saddle.
② Remove the three screws.
③ Remove the Terminal panel L.
④ Remove the two screws.
⑤ Remove the IR holder.



⑥ Remove the three screws.
⑦ Remove the front chassis VL (5050).



⑧ Remove the six screws.
⑨ Disconnect the two pin connectors.
⑩ Remove the two PCB spacers.
⑪ Remove the four edge card spacers.
⑫ Remove the 50 SCAN A and B Assys.

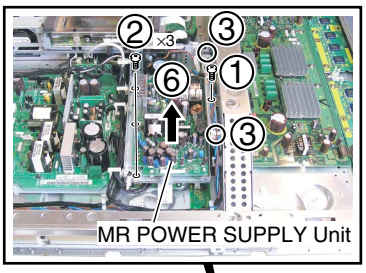


●MULTI BASE SECTION (PDP-5050SX and PDP-4350SX)

Note:
To access the multi base section, only the rear case and under cover must be removed. No other parts need to be removed.

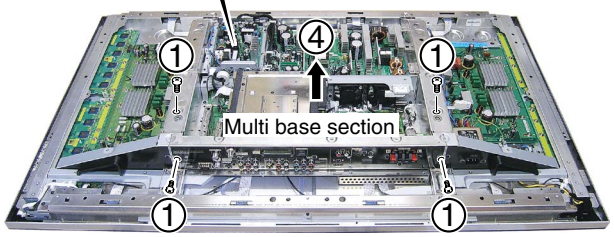
• MR POWER SUPPLY Unit Section

① Remove the one screw.
② Remove the three screws.
③ Unhook the two PCB spacers.
④ Release the some jumper wires at need.
⑤ Disconnect the some connectors at need.
⑥ Remove the MR POWER SUPPLY Unit section.



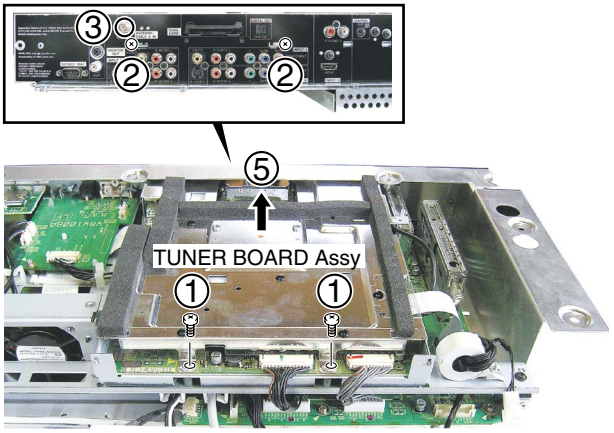
• Multi Base Section

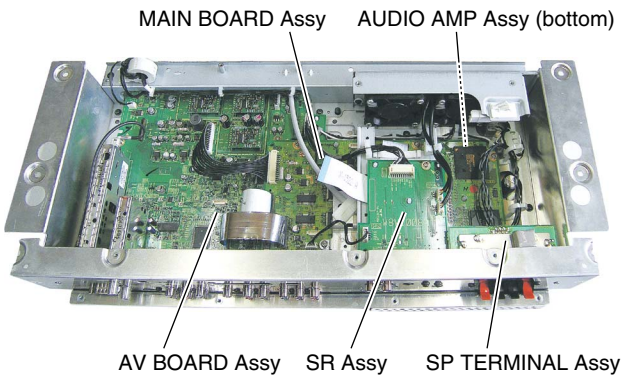
① Remove the four screws.
② Release the some jumper wires at need.
③ Disconnect the some connectors at need.
④ Remove the multi base section.



• TUNER BOARD Assy

① Remove the two screws.
② Remove the two screws.
③ Remove the nut.
④ Disconnect the some connectors at need.
⑤ Remove the TUNER BOARD Assy.





● PDP-4350SX

1 Rear Section

● Rear Case (4350)

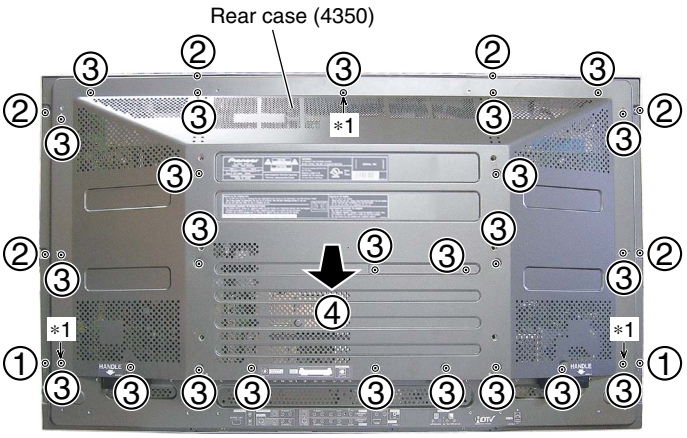
① Remove the two screws.

② Remove the six screws.

③ Remove the 24 screws.

Note ∗1:
When reassembling, first secure the screws for these holes to position the Rear case (4350) correctly.

④ Remove the Rear case (4350).



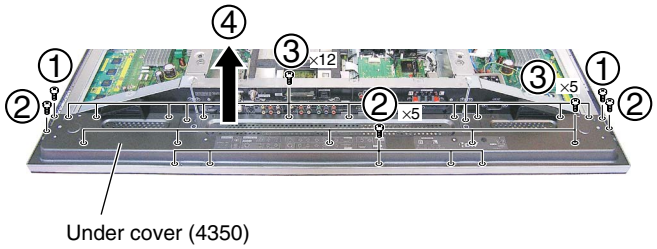
● Under Cover (4350)

① Remove the two screws.

② Remove the seven screws.

③ Remove the 17 screws.

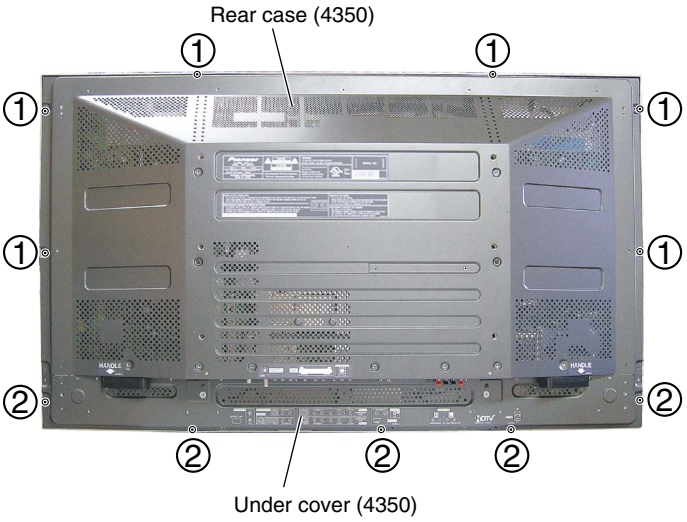
④ Remove the under cover (4350).



Note:
If you wish to remove only the front case Assy (4350), remove it as follows.

① Remove the six screws.

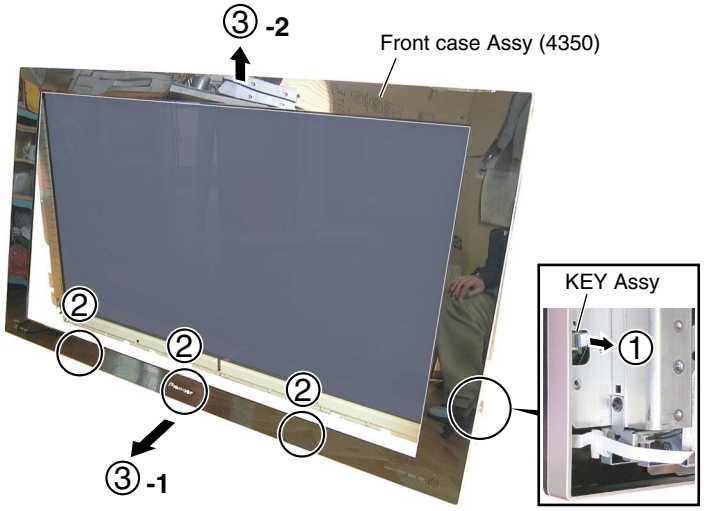
② Remove the five screws.



2 Front Section

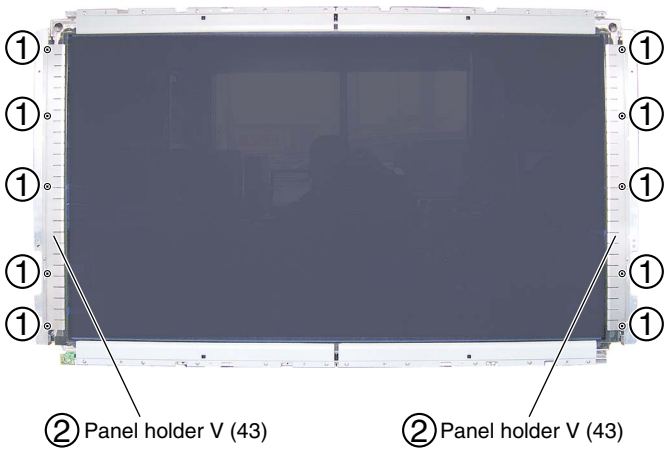
• Front Case Assy (4350)

① Disconnect the flexible cable.
② Unhook the three hooks.
③ Remove the front case Assy (4350).



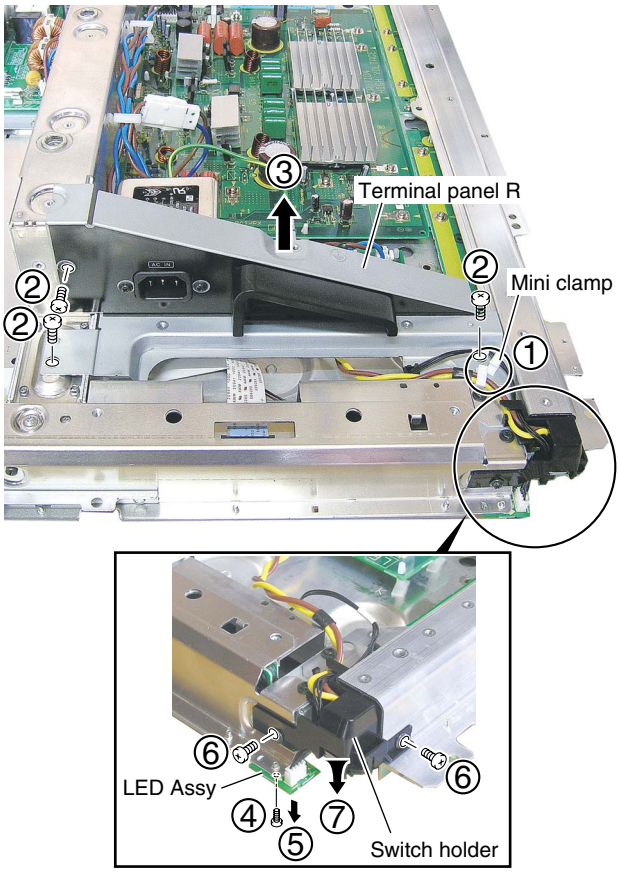
• Panel Holder V (43)

① Remove the ten screws.
② Remove the two panel holder V (43)s.

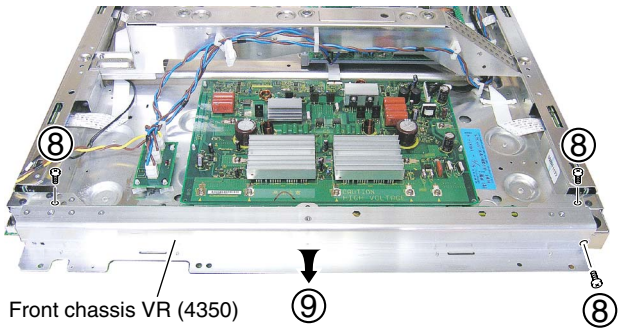


3 X CONNECTOR A and B Assys

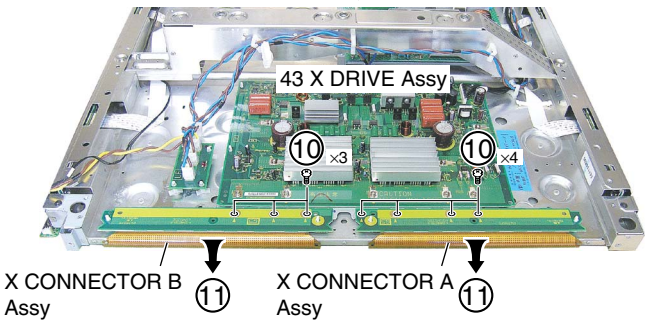
① Remove the jumper wires from the mini clamp.
② Remove the three screws.
③ Remove the Terminal panel R.
④ Remove the one screw.
⑤ Remove the LED Assy.
⑥ Remove the two screws.
⑦ Remove the switch holder.



⑧ Remove the three screws.
⑨ Remove the front chassis VR (4350).

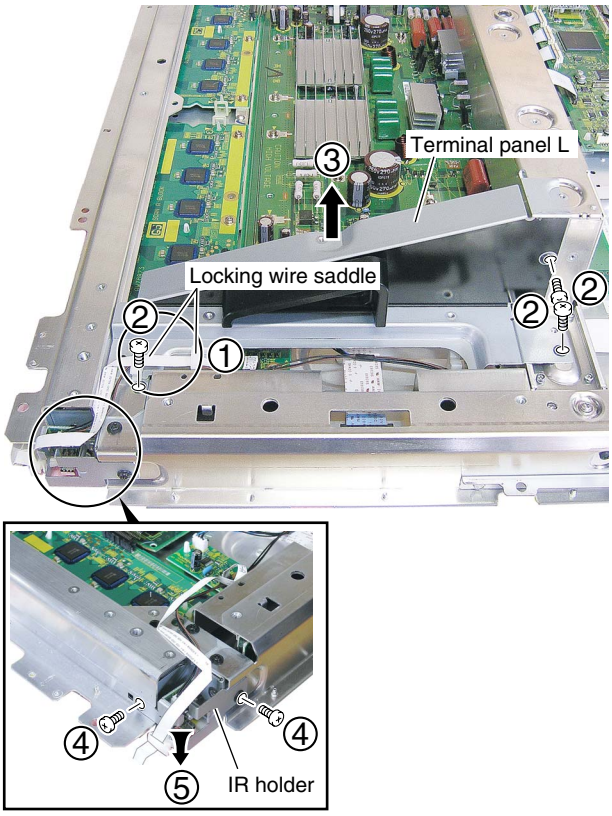


⑩ Remove the seven screws.
⑪ Remove the X CONNECTOR A and B Assys.

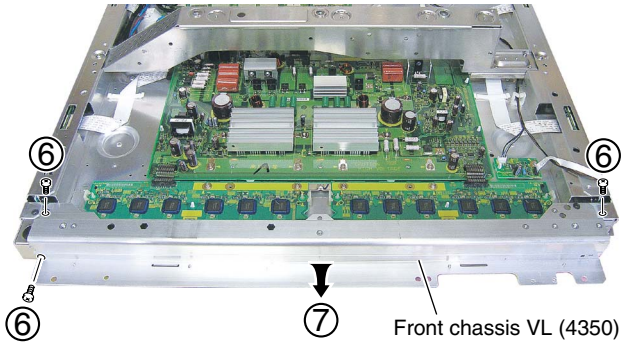


4 43 SCAN A and B Assys

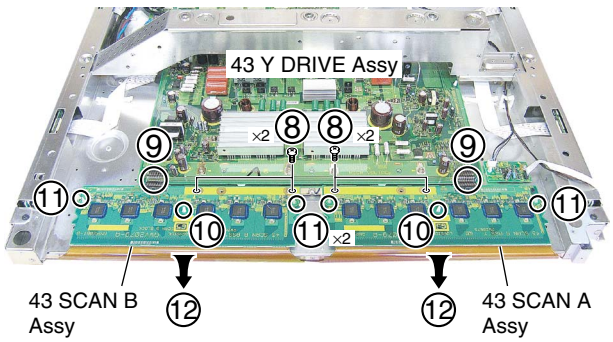
① Remove the flexible cable from the locking wire saddle.
② Remove the three screws.
③ Remove the Terminal panel L.
④ Remove the two screws.
⑤ Remove the IR holder.



⑥ Remove the three screws.
⑦ Remove the front chassis VL (4350).



⑧ Remove the four screws.
⑨ Disconnect the two pin connectors.
⑩ Remove the two PCB spacers.
⑪ Remove the four edge card spacers.
⑫ Remove the 43 SCAN A and B Assys.



7.2 IC INFORMATION

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

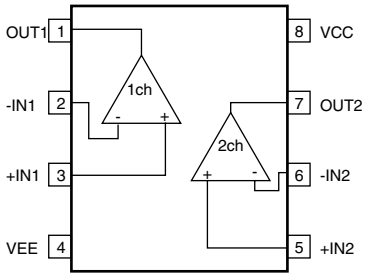
● **List of IC**

BA10393F, BA10358F, STK795-514, STK795-515, STK795-512A, STK795-513A, SN755866PZP, AN16021A-K, BA8274F, NJM2195L, MBM29PL160BD-75PFTN, SII169CTG100, M30622F8PGP-K, PEG054A-K, AD80058-K, SM5301BS, BA7078AF, SII9993CTG100, HY57V643220CT-7, MBM29PL3200BE70PFV, SII170BCLG64, HY57V161610ETP-8-K, AXY1088, AXY1089, AXY1121,CXA2069Q, LA4625

■ BA10393F (43 X DRIVE ASSY: IC1103), (50 X DRIVE ASSY: IC1103) (43 Y DRIVE ASSY: IC2211), (50 Y DRIVE ASSY: IC2211)

• Comparator IC

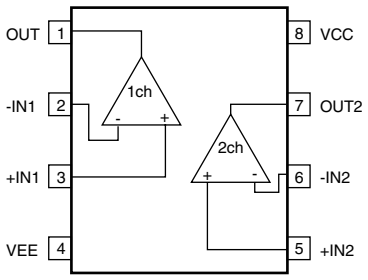
● **Pin Arrangement (Top view) / Block Diagram**



■ BA10358F (43 Y DRIVE ASSY: IC2406), (50 Y DRIVE ASSY: IC2406)

• OP-AMP IC

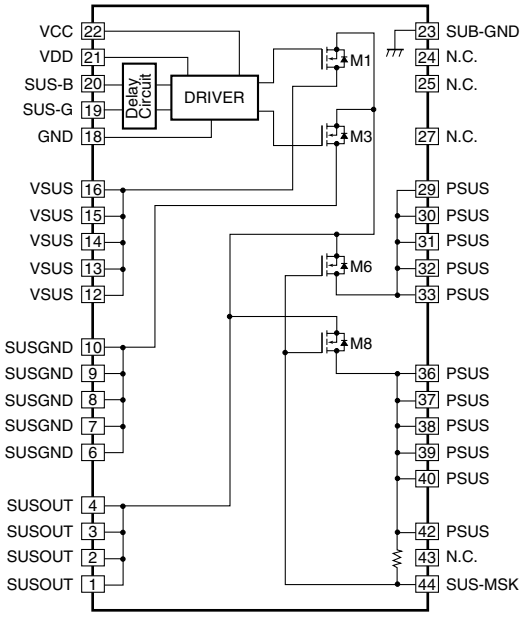
● **Pin Arrangement (Top view) / Block Diagram**



■ STK795-514 (43 X DRIVE ASSY: IC1203, IC1207)

• PDP Mask Module IC

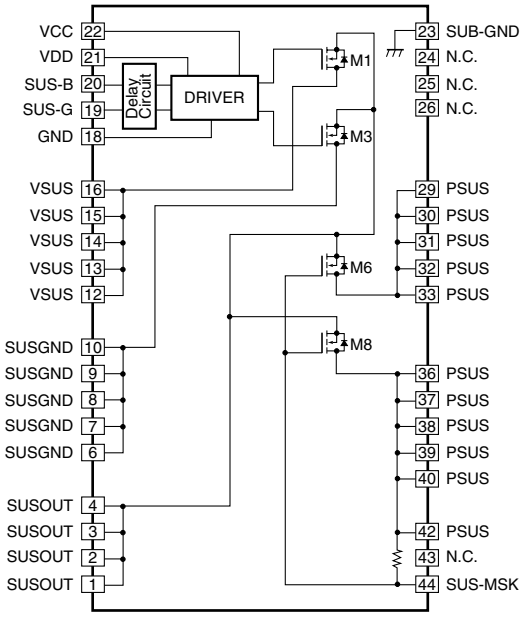
● Block Diagram



■ STK795-515 (43 Y DRIVE ASSY: IC2303, IC2307)

• PDP Mask Module IC

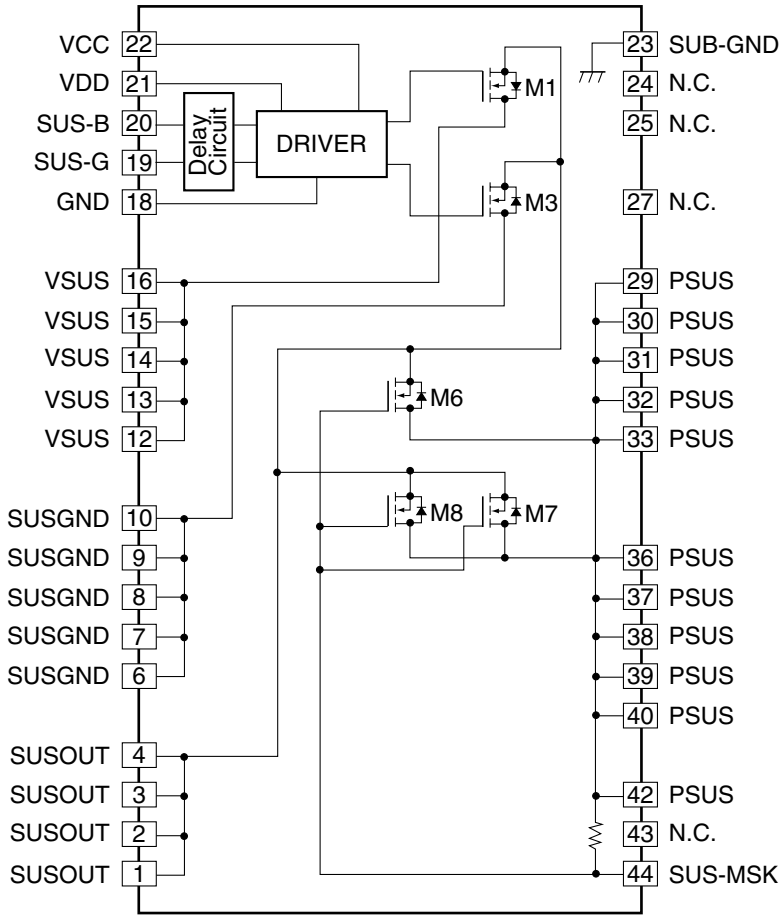
● Block Diagram



■ STK795-512A (50 X DRIVE ASSY: IC1203, IC1207)

PDP Mask Module IC

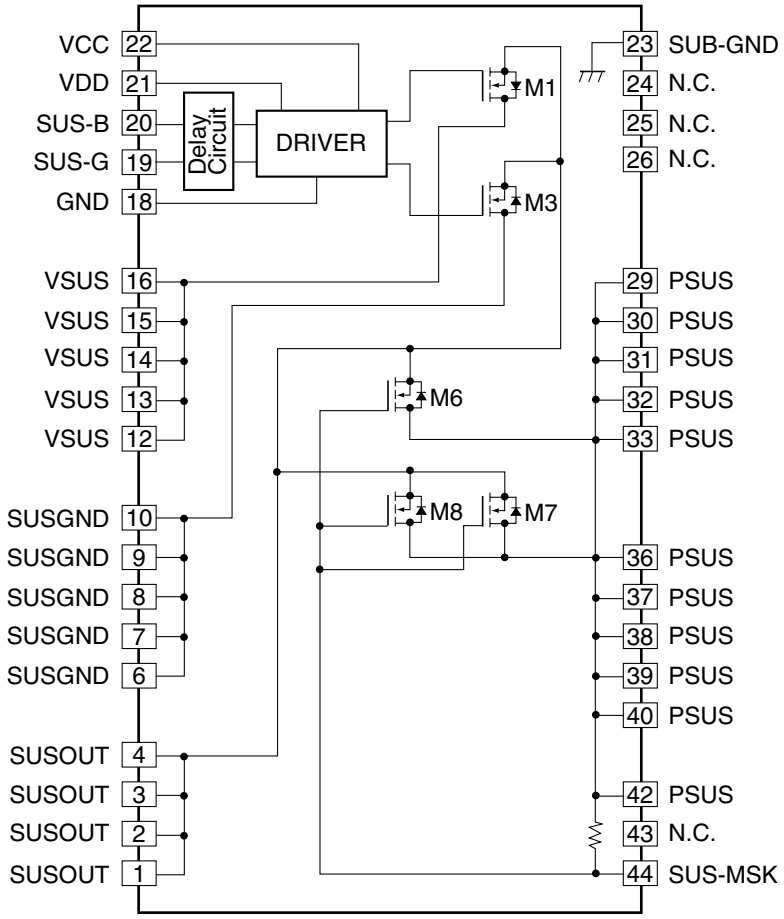
● Block Diagram



■ STK795-513A (50 Y DRIVE ASSY: IC2303, IC2307)

PDP Mask Module IC

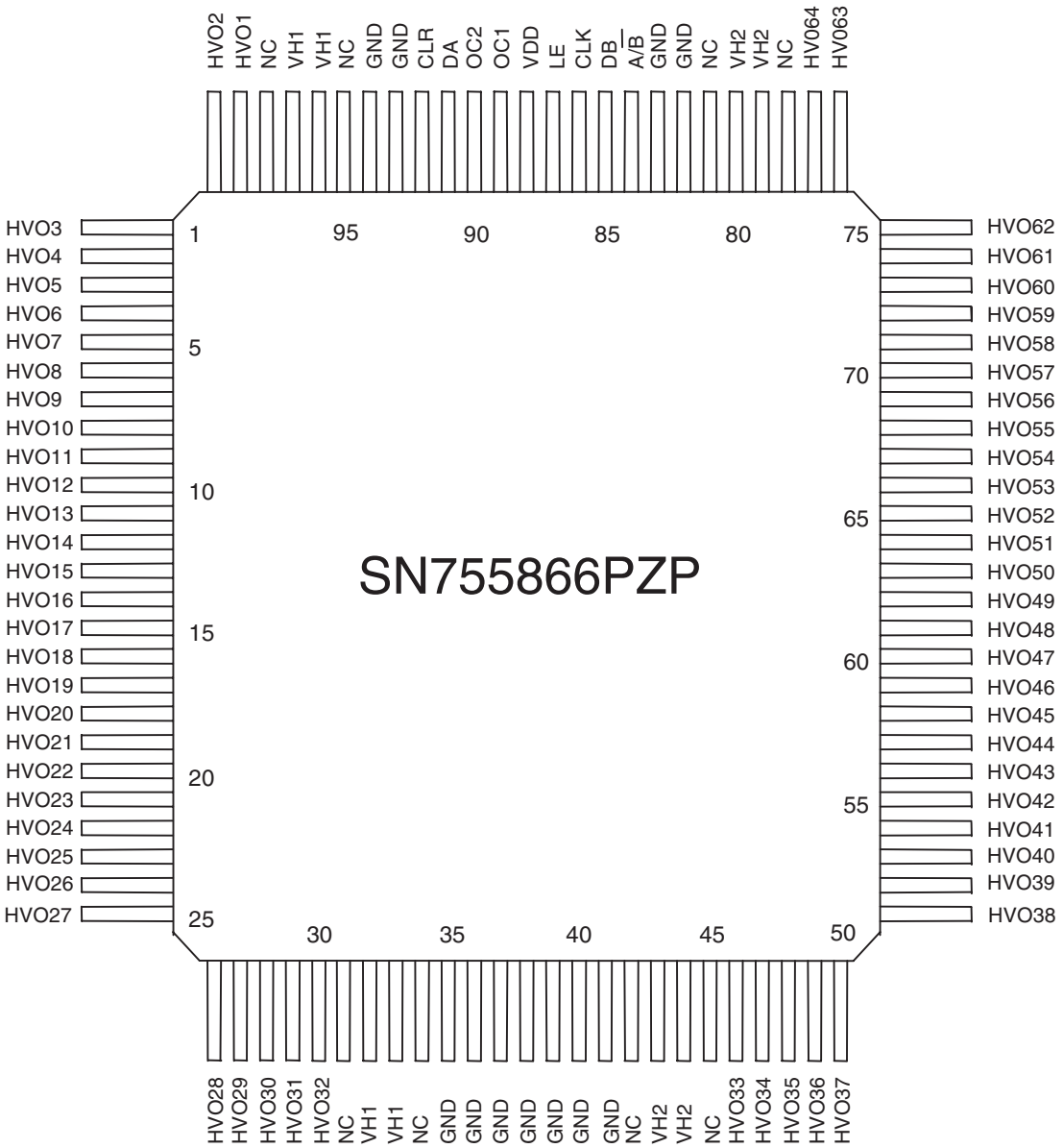
● Block Diagram



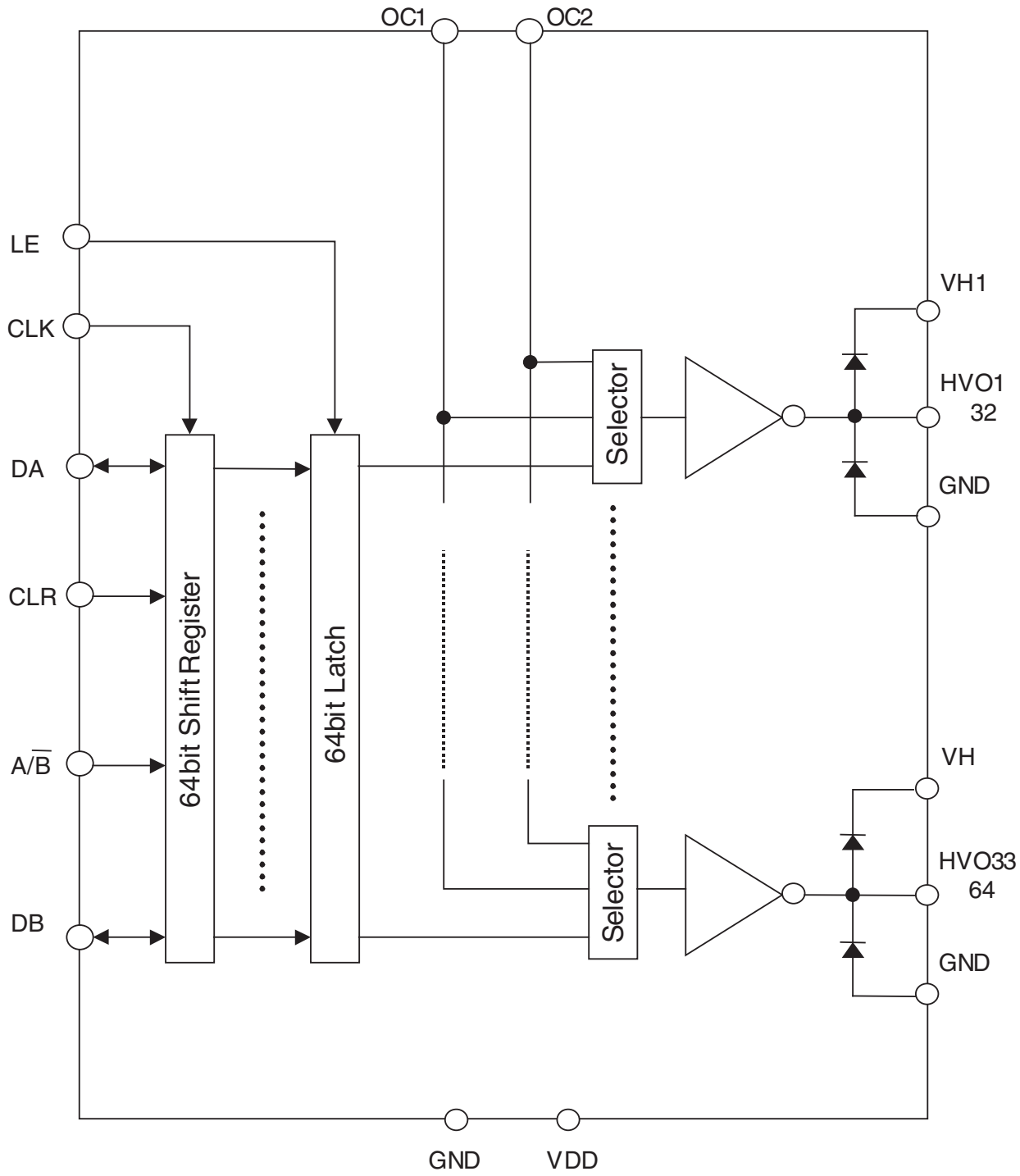
■ SN755866PZP (43 SCAN A ASSY : IC3001 - IC3006)
(43 SCAN B ASSY : IC3201 - IC3206)

• Mod Ucom

● Pin Arrangement (Top view)


SN755866PZP
HVO2 HVO1 NC VH1 VH1 NC GND GND CLR DA OC2 OC1 VDD LE CLK DB/A GND GND NC VH2 VH2 NC HV064 HV063
HVO3 HVO4 HVO5 HVO6 HVO7 HVO8 HVO9 HVO10 HVO11 HVO12 HVO13 HVO14 HVO15 HVO16 HVO17 HVO18 HVO19 HVO20 HVO21 HVO22 HVO23 HVO24 HVO25 HVO26 HVO27
HVO62 HVO61 HVO60 HVO59 HVO58 HVO57 HVO56 HVO55 HVO54 HVO53 HVO52 HVO51 HVO50 HVO49 HVO48 HVO47 HVO46 HVO45 HVO44 HVO43 HVO42 HVO41 HVO40 HVO39 HVO38
1 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95
HVO28 HVO29 HVO30 HVO31 HVO32 NC VH1 VH1 NC GND GND GND GND GND GND GND NC VH2 VH2 NC HVO33 HVO34 HVO35 HVO36 HVO37

● **Block Diagram**



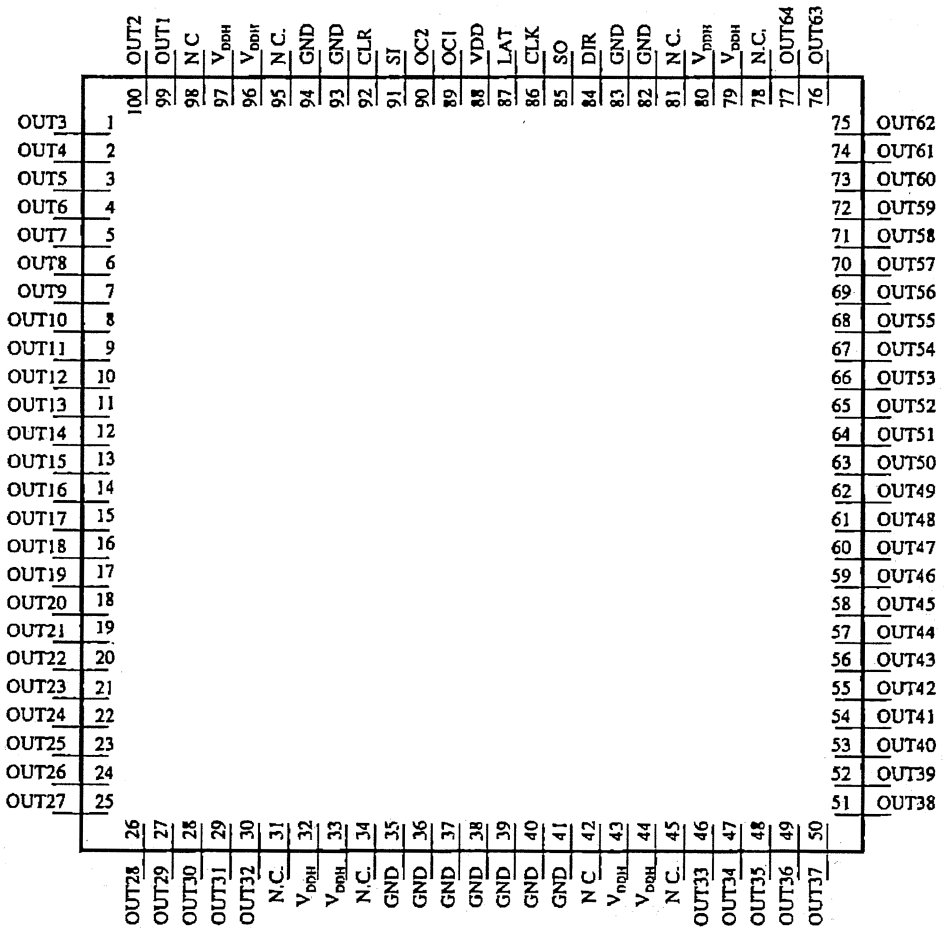
● **Pin Function**

Pin Name	No.	I/O	Function
CLK	86	I	Shift clock.
DA	91	I / O	Serial data input/output of Sift register pin.
DB	85	I / O	Serial data input/output of Sift register pin.
CLR	92	I	"H" level: sift register contents of "L" level.
LE	87	I	"L" level: Slew, "H" level: Larch
A/$\overline{B}$	84	I	Setup pin of sift register sift direction.
OC1	89	I	HVO Output control pin.
OC2	90	I	HVO Output control pin.
HVO	99,100,1-30 46-77	O	High-voltage drive output. (HVO1 - HVO64)
VDD	88	-	Logic power supply.
GND	35-41,82-83 93-94	-	Reference potential 0V (HVO diode anode)
VH1	32,33,96,97	-	HVO1 - 32 High voltage circuit power supply (HVO diode cathode).
VH2	43,44,79,80	-	HVO33 - 64 High voltage circuit power supply (HVO diode cathode).
NC	31,34,41,45 78,81,95,98	-	NC pin

■ AN16021A-K (50 SCAN A ASSY : IC3001 - IC3006)
(50 SCAN B ASSY : IC3201 - IC3206)

• **Mod Ucom**

● **Pin Arrangement (Top view)**



● Pin Function (1/2)

Pin No.	Pin Name	Type	Discription
1	OUT3	Output	High-voltage push-pull output pin
2	OUT4		
3	OUT5		
4	OUT6		
5	OUT7		
6	OUT8		
7	OUT9		
8	OUT10		
9	OUT11		
10	OUT12		
11	OUT13		
12	OUT14		
13	OUT15		
14	OUT16		
15	OUT17		
16	OUT18		
17	OUT19		
18	OUT20		
19	OUT21		
20	OUT22		
21	OUT23		
22	OUT24		
23	OUT25		
24	OUT26		
25	OUT27		
26	OUT28		
27	OUT29		
28	OUT30		
29	OUT31		
30	OUT32		
31	NC	-	Not connected
32	VDDH	Supply	High-voltage circuit supply pin
33	VDDH	Supply	High-voltage circuit supply pin
34	NC	-	Not connected
35	GND	Ground	GND pin
36	GND		
37	GND		
38	GND		
39	GND		
40	GND		
41	GND		
42	NC	-	Not connected
43	VDDH	Supply	High-voltage circuit supply pin
44	VDDH	Supply	High-voltage circuit supply pin
45	NC	-	Not connected
46	OUT33	Output	High-voltage push-pull output pin
47	OUT34		
48	OUT35		
49	OUT36		
50	OUT37		
51	OUT38		
52	OUT39		
53	OUT40		
54	OUT41		
55	OUT42		
56	OUT43		
57	OUT44		
58	OUT45		

● Pin Function (2/2)

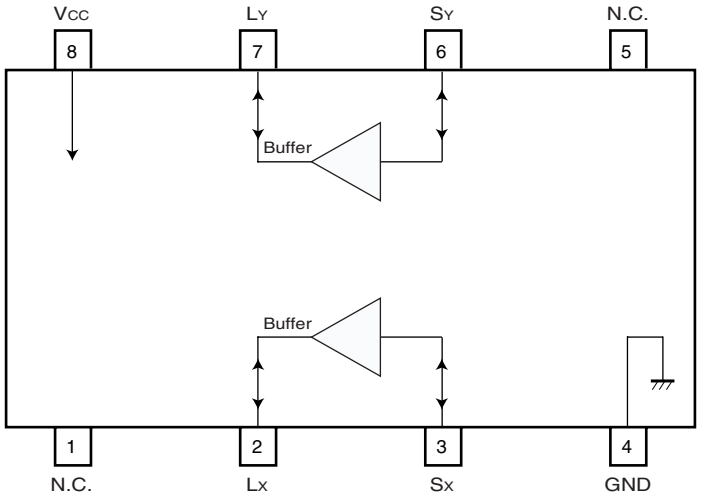
Pin No.	Pin Name	Type	Discription
59	OUT46	Output	High-voltage push-pull output pin
60	OUT47		
61	OUT48		
62	OUT49		
63	OUT50		
64	OUT51		
65	OUT52		
66	OUT53		
67	OUT54		
68	OUT55		
69	OUT56		
70	OUT57		
71	OUT58		
72	OUT59		
73	OUT60		
74	OUT61		
75	OUT62		
76	OUT63		
77	OUT64		
78	NC	-	Not connected
79	DDDH	Supply	High-voltage circuit supply pin
80	DDDH	Supply	High-voltage circuit supply pin
81	NC	-	Not connected
82	GND	Ground	GND pin
83	GND	Ground	GND pin
84	DIR	Input	Setup pin of sift register sift direction L: Shift into reverse (SO → SI) H: Shift forward (SI → SO)
85	SO	Input	Serial data input/output pin
86	CLK	Input	Serial clock input pin Fetch SI or SO data to sift register by CLK rise edge
87	LAT	Input	LAT data input pin L: Transfer shft register data to output latch H: Hold data to output latch
88	VDD	Supply	Logic supply pin
89	OC1	Input	Output control pin Control output according to the right truth value table
90	OC2		
91	SI	SI	Input/OutputSerial data input/output pin
92	CLR		All output reset pin CLR pin: L → Normal operation CLR pin: H → All output High
93	GND	Ground	GND pin
94	GND	Ground	GND pin
95	NC	-	Not connected
96	VDDH	Supply	High-voltage circuit supply pin
97	VDDH	Supply	High-voltage circuit supply pin
98	NC	-	Not connected
99	OUT1	Output	High-voltage push-pull output pin
100	OUT2	Output	High-voltage push-pull output pin

OC1	OC2	OUT
L	L	ALL Hi-Z
L	H	DATA
H	L	ALL L
H	H	ALL H

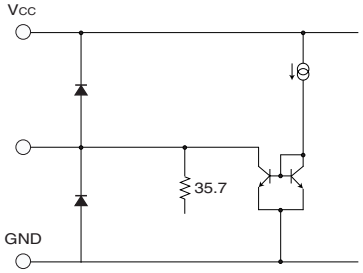
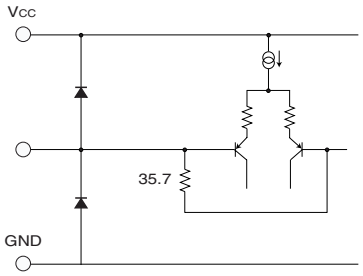
■ BA8274F (DIGITAL VIDEO ASSY: IC4206)

• I^2C Bus Interface IC

● Block Diagram



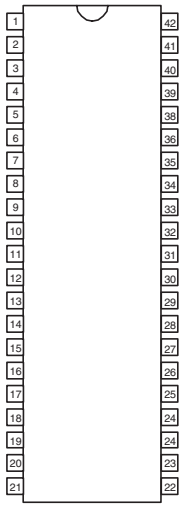
● Pin Function

Pin No.	Pin Name	Equivalent Circuit	Pin Function
2 7	LX LY		Buffer output
3 6	SX SY		Buffer input
4	GND	—	Ground
8	VCC	—	Power supply

■ NJM2195L (AUDIO AMP ASSY: IC3501)

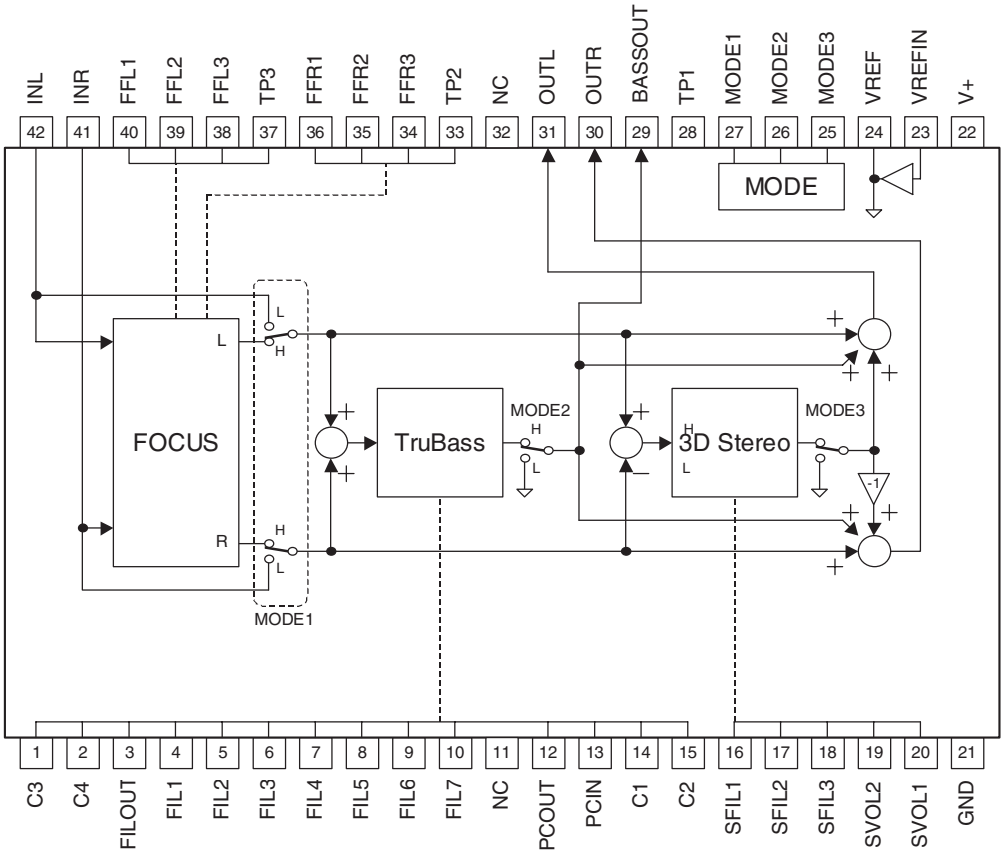
• Focus and SRS IC

● Pin Arrangement (Top view)

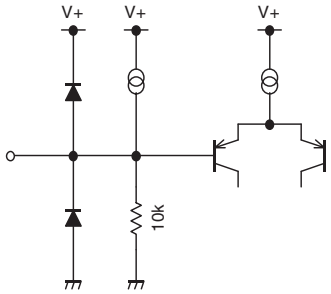
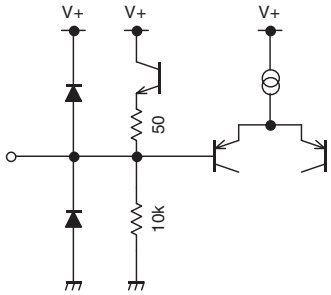
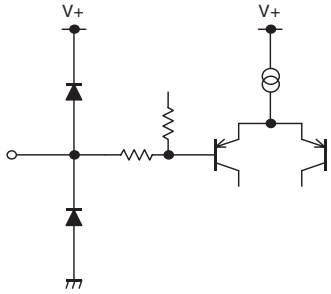
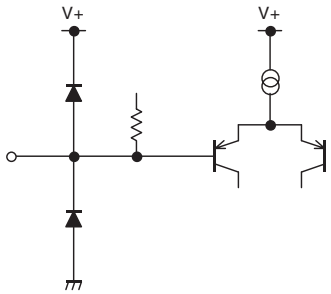


1.	C3	15.	C2	29.	BASSOUT
2.	C4	16.	SFIL1	30.	OUTR
3.	FILOUT	17.	SFIL2	31.	OUTL
4.	FIL1	18.	SFIL3	32.	NC
5.	FIL2	19.	SVOL2	33.	TP2
6.	FIL3	20.	SVOL1	34.	FFR3
7.	FIL4	21.	GND	35.	FFR2
8.	FIL5	22.	V+	36.	FFR1
9.	FIL6	23.	VREFIN	37.	TP3
10.	FIL7	24.	VREF	38.	FFL3
11.	NC	25.	MODE3	39.	FFL2
12.	PCOUT	26.	MODE2	40.	FFL1
13.	PCIN	27.	MODE1	41.	INR
14.	C1	28.	TP1	42.	INL

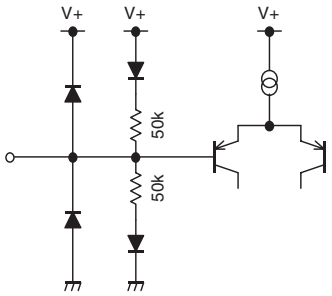
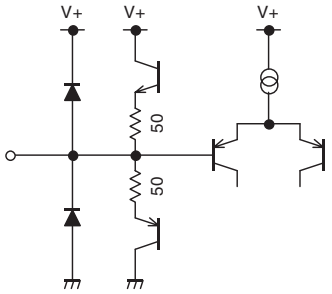
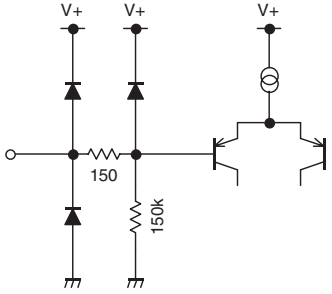
● Block Diagram



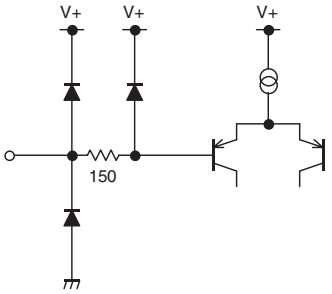
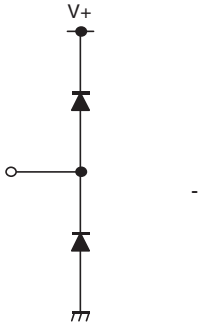
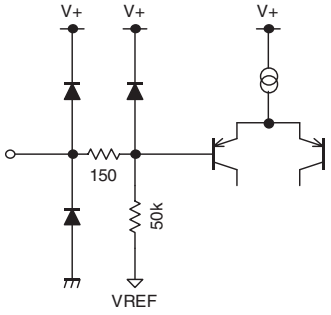
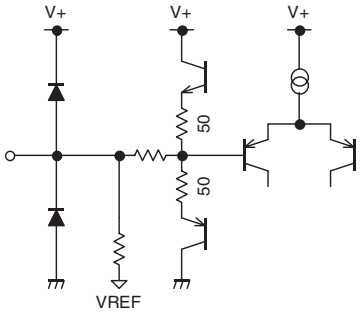
● Pin Function

No.			Pin Name		Equivalent Circuit	
SDIP42	SOP40	QFP48				
14	13	9	C1			0V
15	14	10	C2			0V
16 17 18	15 16 17	11 14 15	SFIL1 SFIL2 SFIL3			V+/2
19 2 5	18 2 5	16 44 47	SVOL2 C4 FIL2	WIDTH VR		V+/2

● Pin Function

No. SDIP42	No. SOP40	No. QFP48	Pin Name		Equivalent Circuit	
21	20	18	GND	GND	———	0V
22	21	19	V+		———	V+
23	22	20	VREFIN			V+/2
24 29 30 31 36 40 3	23 28 29 30 34 38 3	21 28 29 30 34 40 45	VREF BASSOUT OUTR OUTL FFR1 FFL1 FILOUT	TruBass Rch Lch		V+/2
25 26 27	24 25 26	22 23 26	MODE3 MODE2 MODE1	3 2 1		0V

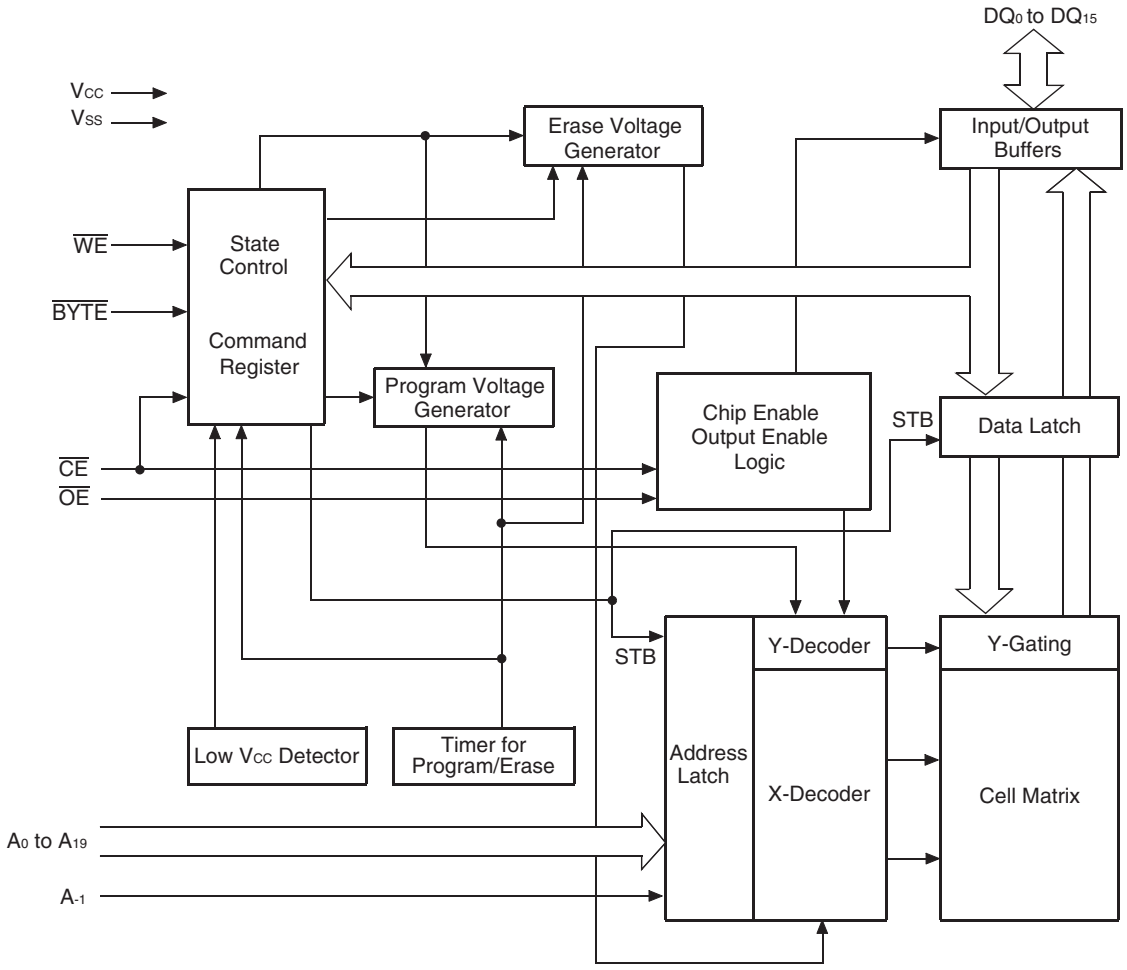
● Pin Function

No.			Pin Name		Equivalent Circuit	
SDIP42	SOP40	QFP48				
28 35 39	27 33 37	27 33 39	TP1 FFR2 FFL2			V+/2
33 37	31 35	31 35	TP2 TP3			-
41 42	39 40	41 42	INR INL	Rch Lch		V+/2
4	4	46	FIL1			V+/2

■ MBM29PL160BD-75PFTN (DIGITAL VIDEO ASSY: IC5305)

• Flash Memory IC

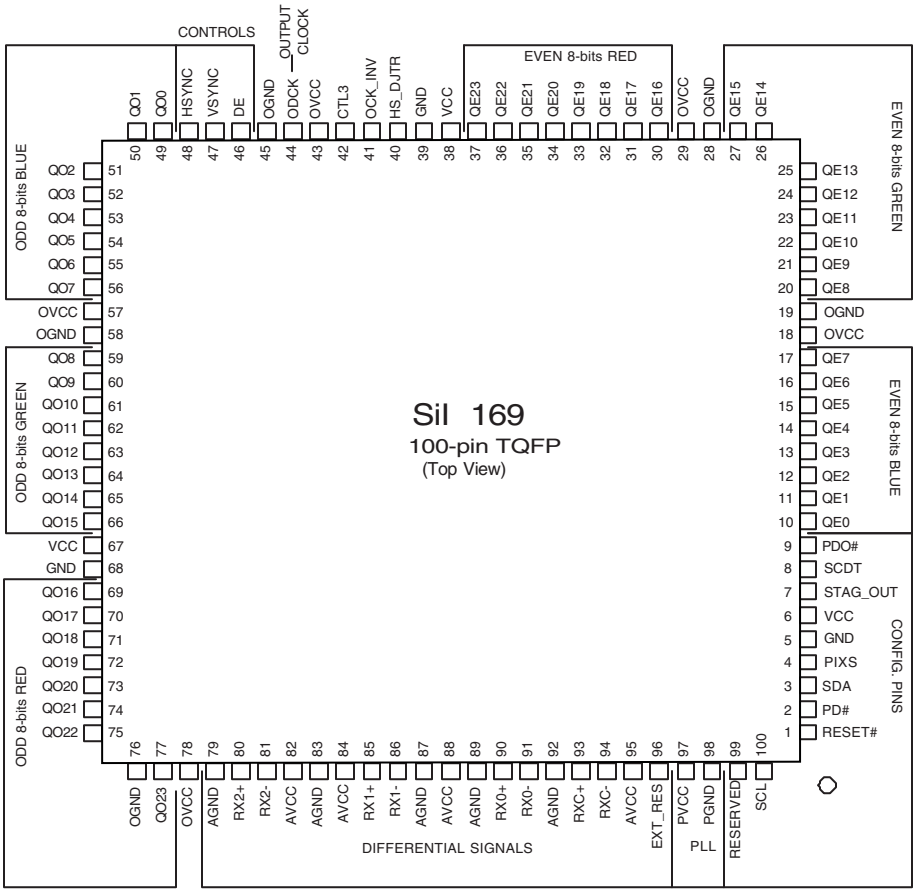
● Block Diagram



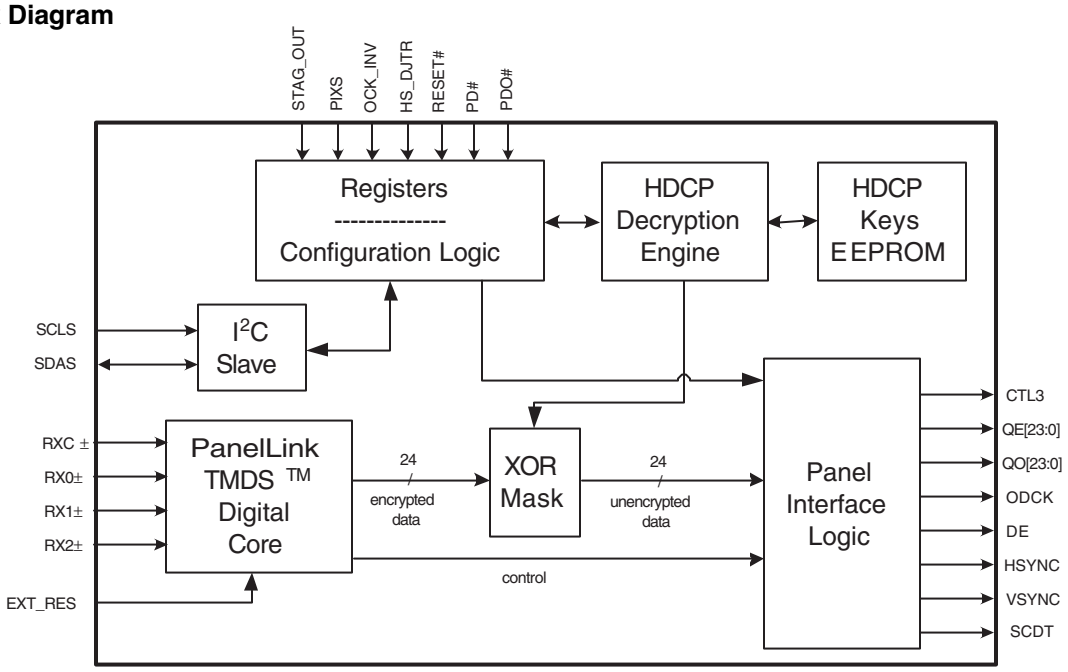
■ SII169CTG100 (DIGITAL VIDEO ASSY: IC4202)

• Receiver IC

● Pin Arrangement (Top view)



● Block Diagram



■ M30622F8PGP-K (DIGITAL VIDEO ASSY : IC5201)

• PDP UCOM

● **Pin Function (1/2)**

No.	Pin Name	Function	I/0	ACTIVE
1	VSUS	[D/A] Vofs power control	O	
2	VOFS	[D/A] Vofs power control	O	
3	TXD_IC4	3 serial communication with IC4MANTA - data transmission	O	
4	RXD_IC4	3 serial communication with IC4MANTA - data receive	I	
5	CLK_IC4	3 serial communication with IC4MANTA - clock output	O	
6	BYTE	(GND connection)	I	
7	CNVSS	Pin for processor mode setting (pull-down)	I	
8	NC	NC pin		
9	NC	NC pin		
10	RST_MD	Reset input	I	L
11	XOUT	Output for main clock	O	–
12	VSS	GND	–	–
13	XIN	Input for main clock	I	–
14	VCC1	Power supply = STB3.3V	–	–
15	NMI	(pull-up)	I	
16	REM_B	(Interruption) Remote control signal input (in the panel unit)	I	
17	KEY_B	(Interruption) Key signal input (in the panel unit)	I	
18	RST2	(Interruption) IC4 reset detection	I	L
19	HD_IN_B	HD signal existence distinction	I	L
20	PD_MUTE	Mute the power down output to the POWER SUPPLY Unit	O	L
21	PS_PD	PD signal in the POWER SUPPLY Unit	I	H
22	DCC_PD	PD signal of DC-DC converter	I	H
23	NC	NC pin		
24	NC	NC pin		
25	VD_IN	V. frequency count	I	L
26	EEPRST	EEPROM power SW	O	H
27	E_SCL	IIC clock output for EEPROM	O	
28	E_SDA	IIC data I/O for EEPROM	I/O	
29	TXD	Communication with flash ROM writer - data transmission	O	
30	RXD	Communication with flash ROM writer - data receive	I	
31	SCLK	Communication with flash ROM writer - clock input	I	
32	BUSY	Communication with flash ROM writer - busy output	O	
33	TXD0	UART communication with main UCOM (external PC) - data transmission	O	
34	RXD0	UART communication with main UCOM (external PC) - data receive	I	
35	NC	NC pin		
36	REQ_MD	Communication request to the main UCOM	O	H
37	PSW_D	Mute of DC-DC converter	O	H
38	WE_IC4	In IC4 (MANTA) rewriting, control for communication path switch	O	H
39	EPM	Setting pin for flash rewriting mode (pull-down)	I	
40	IC4_RST	IC4 forced reset	O	L
41	IC4_CE	Enable for IC4 communication	O	L
42	IC4_BUSY	Busy input for IC4 communication	I	H
43	REQ_IC4	Communication request from the IC4	I	H
44	CE	Setting pin for flash rewriting mode (pull-up)	I	
45	PSIZE	Panel size distinction	I	
46	B_SCL	IIC clock output for backup EEPROM	O	H
47	B_SDA	IIC DATA I/O for backup EEPROM	I/O	H
48	ADR_PD	PD signal of address junction	I	H
49	LED_G	Green LED control	O	L
50	LED_R	Red LED control	O	L

■ M30622F8PGP-K (DIGITAL VIDEO ASSY : IC5201)

• PDP UCOM

● **Pin Function (2/2)**

No.	Pin Name	Function	I/0	ACTIVE
51	DRV_OFF	Driving OFF	O	H
52	RELAY	Power ON control output	O	H
53	POWER	Power ON control input	I	H
54	MR_ST_B	MDR connection detection	I	L
55	OP_DET	Rear case open detection	I	
56	NC	NC pin		
57	PNL_MUTE	Panel mute	I	
58	DITHER	PC/VIDEO dither switch (panel module exclusive use)	I	
59	NC	NC pin		
60	VCC2	Power supply = STB 3.3V	–	–
61	PD_TRG	PD detection	I	L
62	VSS	GND	–	–
63	VH_PD	Vh power decrease PD	I	H
64	YDRV_PD	Y drive PD signal	I	H
65	YRES_PD	Y drive PD signal	I	H
66	YDCDC_PD	PD signal of Y drive DC-DC converter	I	H
67	IC5V_PD	5V power decrease PD	I	H
68	XSUS_PD	X drive PD signal	I	H
69	XDCDC_PD	PD signal of X drive DC-DC converter	I	H
70	XDRV_PD	X drive PD signal	I	H
71	NC	NC pin		
72	MR_AC	MR power monitor	I	H
73	AC_DET	AC power monitor at panel side (same signal as CST1)	I	L
74	DVI_MUTE	Mute of panel link output	O	H
75	A_MUTE	Audio mute	O	H
76	A_NG	Audio NG detection	I	L
77	A_SCL	IIC clock output for audio/others	O	L
78	A_SDA	IIC data I/O for audio/others	I/O	L
79	TRUBASS	TRUBASS ON/OFF	O	H
80	STB_SW	Standby setting of audio amp.	O	L
81	FOCUS	FOCUS ON/OFF	O	H
82	SRS	SRS ON/OFF	O	H
83	DDC_WP	DDCROM write protection	O	H
84	DVI_DET	DVI cable disconnection detection	I	H
85	RSTBTMDS	Reset detection of panel link receiver	I	L
86	L_SYNC	DE omission detection of the panel link	I	L
87	NC	NC pin		
88	NC	NC pin		
89	MASK1	[A/D] Mask display setting	I	
90	MAX_PLS2	[A/D] Brightness setting for panel module	I	
91	MAX_PLS1	[A/D] Brightness setting for panel module	I	
92	TEMP	[A/D] AD input for temperature sensor	I	
93	MODE	[A/D] Operation mode setting	I	
94	AVSS	GND for A/D input	–	–
95	MODEL	[A/D] CMX/HD/TV/WX distinction	I	
96	VREF	Reference voltage for A/D input	–	–
97	AVCC	Power supply for A/D input = STB3.3V	–	–
98	NC	NC pin		
99	NC	NC pin		
100	AMG_MD	Address emergency monitor	I	H

■ PEG054A-K (DIGITAL VIDEO ASSY : IC5401)

• PDP ASIC IC4

● Pin Function (1/10)

Ball No.	No.	Pin Name	Function
A1	1	BAI_6	A phase signal input of B video (sixth bit)
B1	2	BAI_5	A phase signal input of B video (fifth bit)
C1	3	BAI_4	A phase signal input of B video (fourth bit)
D1	4	NC	NC pin
E1	5	NC	NC pin
F1	6	BAI_3	A phase signal input of B video (fifth bit)
G1	7	BAI_2	A phase signal input of B video (fourth bit)
H1	8	FIELD	FIELD signal input
J1	9	XSUSB_12	X-Drive control signal output
K1	10	XSUSB_10	X-Drive control signal output
L1	11	XSUSB_4	X-Drive control signal output
M1	12	XSUSB_0	X-Drive control signal output
N1	13	XSUSA_10	X-Drive control signal output
P1	14	XSUSA_4	X-Drive control signal output
R1	15	XSUSA_2	X-Drive control signal output
T1	16	ADRS_0	Address control signal output
U1	17	AD6TXOUT3M	Address LVDS signal output
V1	18	AD6TXCLKOUTM	Address LVDS signal output
W1	19	AD6TXOUT2M	Address LVDS signal output
Y1	20	AD6TXOUT1M	Address LVDS signal output
AA1	21	AD6TXOUT0M	Address LVDS signal output
AB1	22	AD7TXOUT3M	Address LVDS signal output
AC1	23	AD7TXCLKOUTM	Address LVDS signal output
AD1	24	AD7TXOUT2M	Address LVDS signal output
AE1	25	AD7TXOUT1M	Address LVDS signal output
AF1	26	AD7TXOUT0M	Address LVDS signal output
AF2	27	AD7TXOUT0P	Address LVDS signal output
AF3	28	VSSLA	GND
AF4	29	AD3TXOUT3M	Address LVDS signal output
AF5	30	AD3TXCLKOUTM	Address LVDS signal output
AF6	31	AD3TXOUT2M	Address LVDS signal output
AF7	32	AD3TXOUT1M	Address LVDS signal output
AF8	33	AD3TXOUT0M	Address LVDS signal output
AF9	34	AD2TXOUT3M	Address LVDS signal output
AF10	35	AD2TXCLKOUTM	Address LVDS signal output
AF11	36	AD2TXOUT2M	Address LVDS signal output
AF12	37	AD2TXOUT1M	Address LVDS signal output
AF13	38	AD2TXOUT0M	Address LVDS signal output
AF14	39	AD1TXOUT3M	Address LVDS signal output
AF15	40	AD1TXCLKOUTM	Address LVDS signal output
AF16	41	AD1TXOUT2M	Address LVDS signal output
AF17	42	AD1TXOUT1M	Address LVDS signal output
AF18	43	AD1TXOUT0M	Address LVDS signal output
AF19	44	AD0TXOUT3M	Address LVDS signal output
AF20	45	AD0TXCLKOUTM	Address LVDS signal output
AF21	46	AD0TXOUT2M	Address LVDS signal output
AF22	47	AD0TXOUT1M	Address LVDS signal output
AF23	48	AD0TXOUT0M	Address LVDS signal output
AF24	49	VSSL15	GND
AF25	50	AD4TXOUT3P	Address LVDS signal output

■ PEG054A-K (DIGITAL VIDEO ASSY : IC5401)

• PDP ASIC IC4

● Pin Function (2/10)

Ball No.	No.	Pin Name	Function
AF26	51	AD4TXOUT3M	Address LVDS signal output
AE26	52	AD4TXCLKOUTM	Address LVDS signal output
AD26	53	AD4TXOUT2M	Address LVDS signal output
AC26	54	AD4TXOUT1M	Address LVDS signal output
AB26	55	AD4TXOUT0M	Address LVDS signal output
AA26	56	AD5TXOUT3M	Address LVDS signal output
Y26	57	AD5TXCLKOUTM	Address LVDS signal output
W26	58	AD5TXOUT2M	Address LVDS signal output
V26	59	AD5TXOUT1M	Address LVDS signal output
U26	60	AD5TXOUT0M	Address LVDS signal output
T26	61	SDIDBI_N	JTAG signal
R26	62	SDIJTAG	JTAG signal
P26	63	GPIO0_3	Microcomputer macro general-purpose port
N26	64	GPIO0_1	Microcomputer macro general-purpose port
M26	65	YSUSA_4	Y-Drive control signal output
L26	66	YSUSA_10	Y-Drive control signal output
K26	67	YSUSA_14	Y-Drive control signal output
J26	68	YSUSB_4	Y-Drive control signal output
H26	69	YSUSB_6	Y-Drive control signal output
G26	70	YSUSB_10	Y-Drive control signal output
F26	71	YSUSB_14	Y-Drive control signal output
E26	72	NC	NC pin
D26	73	NC	NC pin
C26	74	SCAN_10	Scan control signal output
B26	75	CSIOTXD	Communication with microcomputer
A26	76	CSRD_N	Communication with microcomputer
A25	77	CSCS_N0	Communication with microcomputer
A24	78	EXA16	Flash memory address bus
A23	79	EXA15	Flash memory address bus
A22	80	EXA14	Flash memory address bus
A21	81	EXA13	Flash memory address bus
A20	82	EXA12	Flash memory address bus
A19	83	EXA10	Flash memory address bus
A18	84	EXA7	Flash memory address bus
A17	85	EXA1	Flash memory address bus
A16	86	EXDIO_3	Flash memory data bus
A15	87	EXDIO_5	Flash memory data bus
A14	88	EXDIO_11	Flash memory data bus
A13	89	TRNSEND_O	NC pin
A12	90	RBI_5	B phase signal input of R video (fifth bit)
A11	91	RBI_0	B phase signal input of R video (0 bit)
A10	92	GBI_8	B phase signal input of G video (eighth bit)
A9	93	GBI_2	B phase signal input of G video (second bit)
A8	94	BBI_6	B phase signal input of B video (sixth bit)
A7	95	BBI_0	B phase signal input of B video (0 bit)
A6	96	VDI	VD signal input
A5	97	RAI_5	A phase signal input of R video (fifth bit)
A4	98	DCLKI	CLK input
A3	99	GAI_4	A phase signal input of G video (fourth bit)
A2	100	BAI_9	A phase signal input of B video (ninth bit)

■ PEG054A-K (DIGITAL VIDEO ASSY : IC5401)

• PDP ASIC IC4

● **Pin Function (3/10)**

Ball No.	No.	Pin Name	Function
B2	101	BAI_8	A phase signal input of B video (eighth bit)
C2	102	BAI_7	A phase signal input of B video (seventh bit)
D2	103	GND	GND
E2	104	NC	NC
F2	105	NC	NC
G2	106	BAI_1	A phase signal input of B video (first bit)
H2	107	XSUSB_15	X-Drive control signal output
J2	108	GND	GND
K2	109	XSUSB_9	X-Drive control signal output
L2	110	XSUSB_3	X-Drive control signal output
M2	111	XSUSA_15	X-Drive control signal output
N2	112	XSUSA_9	X-Drive control signal output
P2	113	GND	GND
R2	114	XSUSA_1	X-Drive control signal output
T2	115	TEST2	Test signal input (Not used)
U2	116	AD6TXOUT3P	Address LVDS signal output
V2	117	AD6TXCLKOUTP	Address LVDS signal output
W2	118	AD6TXOUT2P	Address LVDS signal output
Y2	119	AD6TXOUT1P	Address LVDS signal output
AA2	120	AD6TXOUT0P	Address LVDS signal output
AB2	121	AD7TXOUT3P	Address LVDS signal output
AC2	122	AD7TXCLKOUTP	Address LVDS signal output
AD2	123	AD7TXOUT2P	Address LVDS signal output
AE2	124	AD7TXOUT1P	Address LVDS signal output
AE3	125	VSSLA	GND
AE4	126	AD3TXOUT3P	Address LVDS signal output
AE5	127	AD3TXCLKOUTP	Address LVDS signal output
AE6	128	AD3TXOUT2P	Address LVDS signal output
AE7	129	AD3TXOUT1P	Address LVDS signal output
AE8	130	AD3TXOUT0P	Address LVDS signal output
AE9	131	AD2TXOUT3P	Address LVDS signal output
AE10	132	AD2TXCLKOUTP	Address LVDS signal output
AE11	133	AD2TXOUT2P	Address LVDS signal output
AE12	134	AD2TXOUT1P	Address LVDS signal output
AE13	135	AD2TXOUT0P	Address LVDS signal output
AE14	136	AD1TXOUT3P	Address LVDS signal output
AE15	137	AD1TXCLKOUTP	Address LVDS signal output
AE16	138	AD1TXOUT2P	Address LVDS signal output
AE17	139	AD1TXOUT1P	Address LVDS signal output
AE18	140	AD1TXOUT0P	Address LVDS signal output
AE19	141	AD0TXOUT3P	Address LVDS signal output
AE20	142	AD0TXCLKOUTP	Address LVDS signal output
AE21	143	AD0TXOUT2P	Address LVDS signal output
AE22	144	AD0TXOUT1P	Address LVDS signal output
AE23	145	AD0TXOUT0P	Address LVDS signal output
AE24	146	VSSL15	GND
AE25	147	AD4TXCLKOUTP	Address LVDS signal output
AD25	148	AD4TXOUT2P	Address LVDS signal output
AC25	149	AD4TXOUT1P	Address LVDS signal output
AB25	150	AD4TXOUT0P	Address LVDS signal output

■ PEG054A-K (DIGITAL VIDEO ASSY : IC5401)

• PDP ASIC IC4

● Pin Function (4/10)

Ball No.	No.	Pin Name	Function
AA25	151	AD5TXOUT3P	Address LVDS signal output
Y25	152	AD5TXCLKOUTP	Address LVDS signal output
W25	153	AD5TXOUT2P	Address LVDS signal output
V25	154	AD5TXOUT1P	Address LVDS signal output
U25	155	AD5TXOUT0P	Address LVDS signal output
T25	156	SDITRST_N	JTAG signal
R25	157	RESETX	Reset input
P25	158	GND	GND
N25	159	GPIO0_0	Microcomputer macro general-purpose port
M25	160	YSUSA_5	Y-Drive control signal output
L25	161	YSUSA_11	Y-Drive control signal output
K25	162	YSUSA_15	Y-Drive control signal output
J25	163	GND	GND
H25	164	YSUSB_7	Y-Drive control signal output
G25	165	YSUSB_11	Y-Drive control signal output
F25	166	NC	NC pin
E25	167	NC	NC pin
D25	168	GND	GND
C25	169	SCAN_11	Scan control signal output
B25	170	CSIORXD	Communication with UCOM
B24	171	CSIOSCKI	Communication with UCOM
B23	172	UARTTXD	Communication with UCOM
B22	173	UARTRXD	Communication with UCOM
B21	174	CSWR_N0	Communication with UCOM
B20	175	GND	GND
B19	176	EXA9	Flash memory address bus
B18	177	EXA6	Flash memory address bus
B17	178	EXA0	Flash memory address bus
B16	179	GND	GND
B15	180	EXDIO_6	Flash memory data bus
B14	181	EXDIO_12	Flash memory data bus
B13	182	RBI_9	B phase signal input of R video (ninth bit)
B12	183	RBI_4	B phase signal input of R video (fourth bit)
B11	184	GND	GND
B10	185	GBI_7	B phase signal input of G video (seventh bit)
B9	186	GBI_1	B phase signal input of G video (first bit)
B8	187	BBI_5	B phase signal input of B video (fifth bit)
B7	188	GND	GND
B6	189	HDI	HD signal input
B5	190	RAI_4	A phase signal input of R video (fourth bit)
B4	191	GAI_9	A phase signal input of G video (ninth bit)
B3	192	GAI_3	A phase signal input of G video (third bit)
C3	193	GAI_2	A phase signal input of G video (second bit)
D3	194	VDDD33	3.3V power supply
E3	195	GAI_1	A phase signal input of G video (first bit)
F3	196	GAI_0	A phase signal input of G video (0 bit)
G3	197	NC	NC pin
H3	198	XSUSB_14	X-Drive control signal output
J3	199	VDDIO	3.3V power supply
K3	200	XSUSB_8	X-Drive control signal output

■ PEG054A-K (DIGITAL VIDEO ASSY : IC5401)

• PDP ASIC IC4

● Pin Function (5/10)

Ball No.	No.	Pin Name	Function
L3	201	XSUSB_2	X-Drive control signal output
M3	202	XSUSA_14	X-Drive control signal output
N3	203	XSUSA_8	X-Drive control signal output
P3	204	VDDIO	3.3V power supply
R3	205	XSUSA_0	X-Drive control signal output
T3	206	TEST1	Test signal input (Not used)
U3	207	VSSLA	GND
V3	208	VSSLA	GND
W3	209	VSSLA	GND
Y3	210	VSSLA	GND
AA3	211	VSSLA	GND
AB3	212	VSSLA	GND
AC3	213	VSSLA	GND
AD3	214	VSSLA	GND
AD4	215	VSSLA	GND
AD5	216	VSSLA	GND
AD6	217	VSSLA	GND
AD7	218	VSSLA	GND
AD8	219	VSSLA	GND
AD9	220	VSSLA	GND
AD10	221	VSSLA	GND
AD11	222	VSSLA	GND
AD12	223	VSSLA	GND
AD13	224	VSSLA	GND
AD14	225	VSSLA	GND
AD15	226	VSSLA	GND
AD16	227	VSSLA	GND
AD17	228	VSSLA	GND
AD18	229	VSSLA	GND
AD19	230	VSSLA	GND
AD20	231	VSSLA	GND
AD21	232	VSSLA	GND
AD22	233	VSSLA	GND
AD23	234	VSSLA	GND
AD24	235	VSSLA	GND
AC24	236	VSSLA	GND
AB24	237	VSSLA	GND
AA24	238	VSSLA	GND
Y24	239	VSSLA	GND
W24	240	VSSLA	GND
V24	241	VSSLA	GND
U24	242	VSSLA	GND
T24	243	SDITDO	JTAG signal
R24	244	GPIO0_7	Microcomputer macro general-purpose port
P24	245	VDDIO	3.3V power supply
N24	246	YSUSA_0	Y-Drive control signal output
M24	247	YSUSA_6	Y-Drive control signal output
L24	248	YSUSA_12	Y-Drive control signal output
K24	249	YSUSB_0	Y-Drive control signal output
J24	250	VDDD33	3.3V power supply

■ PEG054A-K (DIGITAL VIDEO ASSY : IC5401)

• PDP ASIC IC4

● Pin Function (6/10)

Ball No.	No.	Pin Name	Function
H24	251	YSUSB_8	Y-Drive control signal output
G24	252	NC	NC pin
F24	253	YSUSB_15	Y-Drive control signal output
E24	254	SCAN_3	Scan control signal output
D24	255	VDDD33	3.3V power supply
C24	256	SCAN_12	Scan control signal output
C23	257	SCAN_13	Scan control signal output
C22	258	SCAN_14	Scan control signal output
C21	259	SCAN_15	Scan control signal output
C20	260	VDDIO	3.3V power supply
C19	261	EXA8	Flash memory address bus
C18	262	EXA5	Flash memory address bus
C17	263	CLKD	CLK input (60MHz)
C16	264	VDDIO	3.3V power supply
C15	265	EXDIO_7	Flash memory data bus
C14	266	EXDIO_13	Flash memory data bus
C13	267	RBI_8	B phase signal input of R video (eighth bit)
C12	268	RBI_3	B phase signal input of R video (third bit)
C11	269	VDDIO	3.3V power supply
C10	270	GBI_6	B phase signal input of G video (sixth bit)
C9	271	GBI_0	B phase signal input of G video (0 bit)
C8	272	BBI_4	B phase signal input of B video (fourth bit)
C7	273	VDDIO	3.3V power supply
C6	274	RAI_9	A phase signal input of R video (ninth bit)
C5	275	RAI_3	A phase signal input of R video (third bit)
C4	276	GAI_8	A phase signal input of G video (eighth bit)
D4	277	GAI_7	A phase signal input of G video (seventh bit)
E4	278	GAI_6	A phase signal input of G video (sixth bit)
F4	279	GAI_5	A phase signal input of G video (fifth bit)
G4	280	VCMP	GND
H4	281	XSUSB_13	X-Drive control signal output
J4	282	XSUSB_11	X-Drive control signal output
K4	283	XSUSB_7	X-Drive control signal output
L4	284	XSUSB_1	X-Drive control signal output
M4	285	XSUSA_13	X-Drive control signal output
N4	286	XSUSA_7	X-Drive control signal output
P4	287	XSUSA_3	X-Drive control signal output
R4	288	ADRS_3	Address control signal output
T4	289	TESTAN	Test signal input (Not used)
U4	290	VDDLA	3.3V power supply
V4	291	VDDLA	3.3V power supply
W4	292	VDDLA	3.3V power supply
Y4	293	VDDLA	3.3V power supply
AA4	294	VDDLA	3.3V power supply
AB4	295	VDDLA	3.3V power supply
AC4	296	VDDLA	3.3V power supply
AC5	297	VDDLA	3.3V power supply
AC6	298	VDDLA	3.3V power supply
AC7	299	VDDLA	3.3V power supply
AC8	300	VDDLA	3.3V power supply

■ PEG054A-K (DIGITAL VIDEO ASSY : IC5401)

• PDP ASIC IC4

● Pin Function (7/10)

Ball No.	No.	Pin Name	Function
AC8	300	VDDLA	3.3V power supply
AC9	301	VDDLA	3.3V power supply
AC10	302	VDDLA	3.3V power supply
AC11	303	VDDLA	3.3V power supply
AC12	304	VDDLA	3.3V power supply
AC13	305	VDDLA	3.3V power supply
AC14	306	VDDBG	3.3V power supply
AC15	307	VDDLA	3.3V power supply
AC16	308	VDDLA	3.3V power supply
AC17	309	VDDLA	3.3V power supply
AC18	310	VDDLA	3.3V power supply
AC19	311	VDDLA	3.3V power supply
AC20	312	VDDLA	3.3V power supply
AC21	313	VDDLA	3.3V power supply
AC22	314	VDDLA	3.3V power supply
AC23	315	VDDLA	3.3V power supply
AB23	316	VDDLA	3.3V power supplyv
AA23	317	VDDLA	3.3V power supply
Y23	318	VDDLA	3.3V power supply
W23	319	VDDLA	3.3V power supply
V23	320	VDDLA	3.3V power supply
U23	321	VDDLA	3.3V power supply
T23	322	SDITDI	JTAG signal
R23	323	GPIO0_6	Microcomputer macro general-purpose port
P23	324	GPIO0_2	Microcomputer macro general-purpose port
N23	325	YSUSA_1	Y-Drive control signal output
M23	326	YSUSA_7	Y-Drive control signal output
L23	327	YSUSA_13	Y-Drive control signal output
K23	328	YSUSB_1	Y-Drive control signal output
J23	329	YSUSB_5	Y-Drive control signal output
H23	330	YSUSB_9	Y-Drive control signal output
G23	331	VCMP	GND
F23	332	SCAN_0	Scan control signal output
E23	333	SCAN_4	Scan control signal output
D23	334	SCAN_7	Scan control signal output
D22	335	SCAN_8	Scan control signal output
D21	336	SCAN_9	Scan control signal output
D20	337	EXA11	Flash memory address bus
D19	338	EXA19	Flash memory address bus
D18	339	EXA4	Flash memory address bus
D17	340	EXDIO_0	Flash memory data bus
D16	341	EXDIO_4	Flash memory data bus
D15	342	EXDIO_8	Flash memory data bus
D14	343	EXDIO_14	Flash memory data bus
D13	344	RBI_7	B phase signal input of R video (seventh bit)
D12	345	RBI_2	B phase signal input of R video (second bit)
D11	346	GBI_9	B phase signal input of G video (ninth bit)
D10	347	GBI_5	B phase signal input of G video (fifth bit)
D9	348	BBI_9	B phase signal input of B video (ninth bit)
D8	349	BBI_3	B phase signal input of B video (tenth bit)

■ PEG054A-K (DIGITAL VIDEO ASSY : IC5401)

• PDP ASIC IC4

● Pin Function (8/10)

Ball No.	No.	Pin Name	Function
D7	350	DEI	DE signal input
D6	351	RAI_8	A phase signal input of R video (eighth bit)
D5	352	RAI_2	A phase signal input of R video (second bit)
E5	353	RAI_1	A phase signal input of R video (first bit)
F5	354	RAI_0	A phase signal input of R video (0 bit)
G5	355	BAI_0	A phase signal input of B video (0 bit)
H5	356	VSS15	GND
J5	357	VDDHR	3.3V power supply
K5	358	XSUSB_6	X-Drive control signal output
L5	359	VSSD15	GND
M5	360	XSUSA_12	X-Drive control signal output
N5	361	XSUSA_6	X-Drive control signal output
P5	362	VSS15	GND
R5	363	ADRS_2	Address control signal output
T5	364	TESTBN	Test signal input (Not used)
U5	365	VSSL15	GND
V5	366	VSSLA	GND
W5	367	VSSLA	GND
Y5	368	VSSL15	GND
AA5	369	VDDLP	3.3V power supply
AB5	370	VSSL15	GND
AB6	371	VSSLA	GND
AB7	372	VSSLA	GND
AB8	373	VSSL15	GND
AB9	374	VSSLA	GND
AB10	375	VSSLA	GND
AB11	376	VSSL15	GND
AB12	377	VSSLA	GND
AB13	378	VSSLA	GND
AB14	379	REFRIN	Reference current generation
AB15	380	VSSBG	GND
AB16	381	VSSL15	GND
AB17	382	VSSLA	GND
AB18	383	VSSLA	GND
AB19	384	VSSL15	GND
AB20	385	VSSLA	GND
AB21	386	VSSLA	GND
AB22	387	VSSLA	GND
AA22	388	VDDLA	3.3V power supply
Y22	389	VSSL15	GND
W22	390	VSSLA	GND
V22	391	VSSLA	GND
U22	392	VSSL15	GND
T22	393	SDITMS	JTAG signal
R22	394	GPIO0_5	Microcomputer macro general-purpose port
P22	395	VSS15	GND
N22	396	YSUSA_2	Y-Drive control signal output
M22	397	YSUSA_8	Y-Drive control signal output
L22	398	VSSD15	GND
K22	399	YSUSB_2	Y-Drive control signal output

■ PEG054A-K (DIGITAL VIDEO ASSY : IC5401)

• PDP ASIC IC4

● Pin Function (9/10)

Ball No.	No.	Pin Name	Function
J22	400	VDDHL	3.3V power supply
H22	401	VSSD15	GND
G22	402	YSUSB_12	Y-Drive control signal output
F22	403	SCAN_1	Scan control signal output
E22	404	SCAN_5	Scan control signal output
E21	405	SCAN_6	Scan control signal output
E20	406	VSS15	GND
E19	407	EXA18	Flash memory address bus
E18	408	EXA3	Flash memory address bus
E17	409	EXDIO_1	Flash memory data bus
E16	410	VSS15	GND
E15	411	EXDIO_9	Flash memory data bus
E14	412	EXDIO_15	Flash memory data bus
E13	413	RBI_6	B phase signal input of R video (sixth bit)
E12	414	CLKS	CLK input (85MHz)
E11	415	VSS15	GND
E10	416	GBI_4	B phase signal input of G video (fourth bit)
E8	418	BBI_2	B phase signal input of B video (second bit)
E9	417	BBI_8	B phase signal input of B video (eighth bit)
E7	419	VSS15	GND
E6	420	RAI_7	A phase signal input of R video (seventh bit)
F6	421	RAI_6	A phase signal input of R video (sixth bit)
G6	422	APL_DT	APL value trigger input
H6	423	VDD15	1.5V power supply
J6	424	VBB	VBB power monitor in the DRAM
K6	425	XSUSB_5	X-Drive control signal output
L6	426	VDDD15	1.5V power supply
M6	427	XSUSA_11	X-Drive control signal output
N6	428	XSUSA_5	X-Drive control signal output
P6	429	VDD15	1.5V power supply
R6	430	ADRS_1	Address control signal output
T6	431	TESTCN	Test signal input (Not used)
U6	432	VDDL15	1.5V power supply
V6	433	VDDLA	3.3V power supply
W6	434	VDDLA	3.3V power supply
Y6	435	VDDL15	1.5V power supply
AA6	436	VDDLA	3.3V power supply
AA7	437	VDDLA	3.3V power supply
AA8	438	VDDL15	1.5V power supply
AA9	439	VDDLA	3.3V power supply
AA10	440	VDDLA	3.3V power supply
AA11	441	VDDL15	1.5V power supply
AA12	442	VDDLA	3.3V power supply
AA13	443	VDDLA	3.3V power supply
AA14	444	VDDLA	3.3V power supply
AA15	445	VDDLA	3.3V power supply
AA16	446	VDDL15	1.5V power supply
AA17	447	VDDLA	3.3V power supply
AA18	448	VDDLA	3.3V power supply
AA19	449	VDDL15	1.5V power supply

■ PEG054A-K (DIGITAL VIDEO ASSY : IC5401)

• PDP ASIC IC4

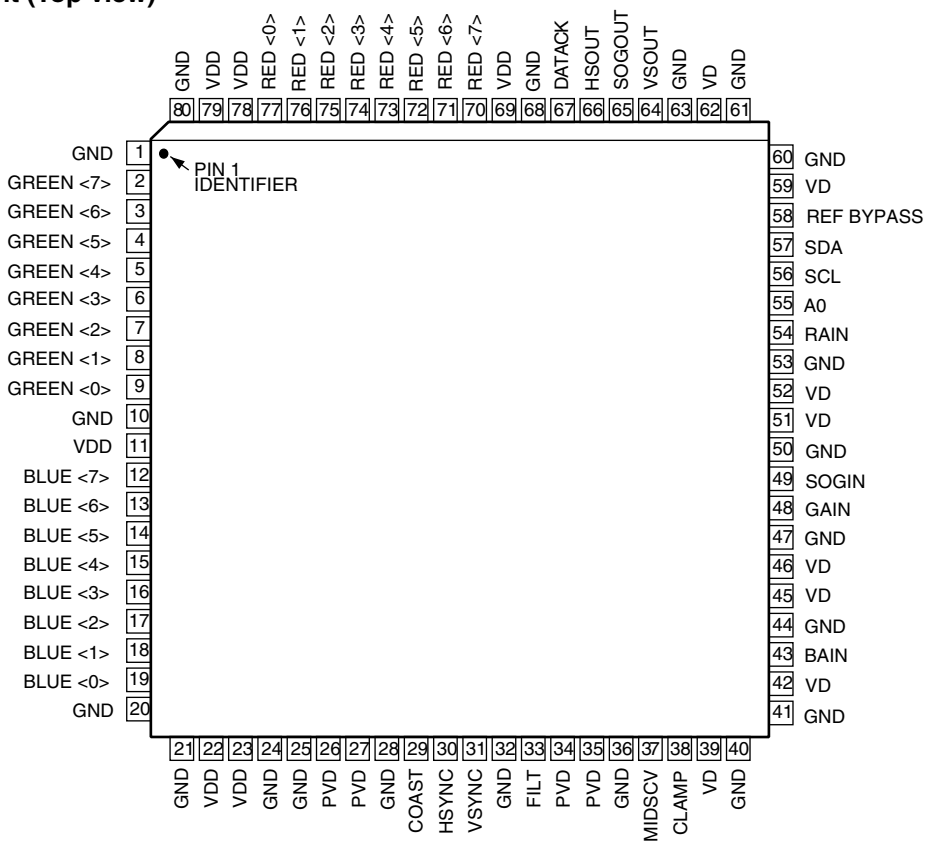
● Pin Function (10/10)

Ball No.	No.	Pin Name	Function
AA20	450	VDDLA	3.3V power supply
AA21	451	VDDLA	3.3V power supply
Y21	452	VDDL15	1.5V power supply
W21	453	VDDLA	3.3V power supply
V21	454	VDDLA	3.3V power supply
U21	455	VDDL15	1.5V power supply
T21	456	SDITCK	JTAG signal
R21	457	GPIO0_4	Microcomputer macro general-purpose port
P21	458	VDD15	1.5V power supply
N21	459	YSUSA_3	Y-Drive control signal output
M21	460	YSUSA_9	Y-Drive control signal output
L21	461	VDDD15	1.5V power supply
K21	462	YSUSB_3	Y-Drive control signal output
J21	463	VBB	VBB power monitor in the DRAM
H21	464	VDDD15	1.5V power supply
G21	465	YSUSB_13	Y-Drive control signal output
F21	466	SCAN_2	Scan control signal output
F20	467	VDD15	1.5V power supply
F19	468	EXA17	Flash memory address bus
F18	469	EXA2	Flash memory address bus
F17	470	EXDIO_2	Flash memory data bus
F16	471	VDD15	1.5V power supply
F15	472	EXDIO_10	Flash memory data bus
F14	473	TRNSEND_I	NC pin
F13	474	VDD15	1.5V power supply
F12	475	RBI_1	B phase signal input of R video (first bit)
F11	476	VDD15	1.5V power supply
F10	477	GBI_3	B phase signal input of G video (third bit)
F9	478	BBI_7	B phase signal input of B video (seventh bit)
F8	479	BBI_1	B phase signal input of B video (first bit)
F7	480	VDD15	1.5V power supply

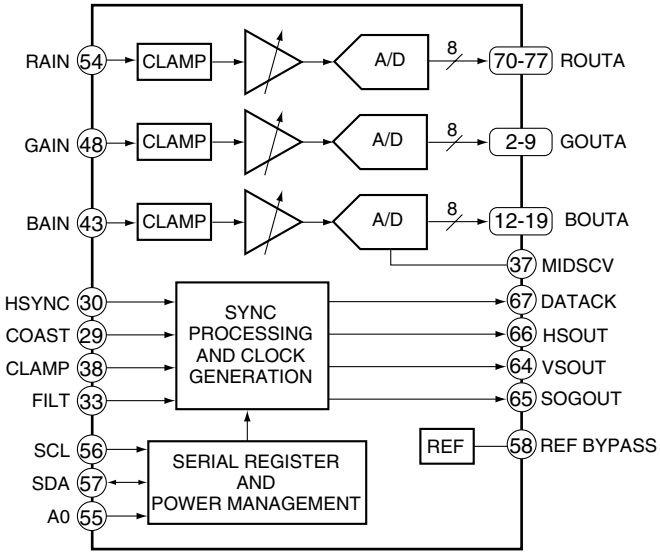
■ AD80058-K (MAIN BOARD ASSY : IC6402, IC6602)

• 110 MSPS Analog Interface

● Pin Arrangement (Top view)



● Block Diagram



● Pin Function

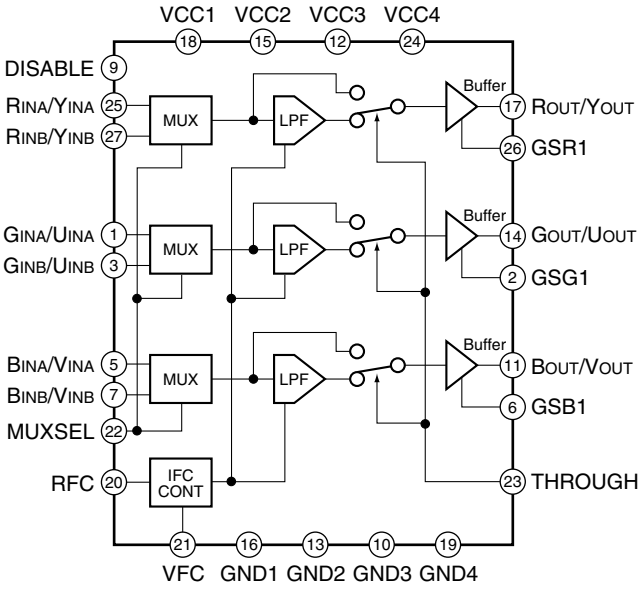
No.	Pin Name	I/O	Pin Function
1	GND	–	Ground
2	GREEN 7	O	Converter Green output (MSB)
3	GREEN 6	O	Converter Green output
4	GREEN 5	O	Converter Green output
5	GREEN 4	O	Converter Green output
6	GREEN 3	O	Converter Green output
7	GREEN 2	O	Converter Green output
8	GREEN 1	O	Converter Green output
9	GREEN 0	O	Converter Green output
10	GND	–	Ground
11	VDD	–	Power supply (3.3V)
12	BLUE 7	O	Converter Blue output (MSB)
13	BLUE 6	O	Converter Blue output
14	BLUE 5	O	Converter Blue output
15	BLUE 4	O	Converter Blue output
16	BLUE 3	O	Converter Blue output
17	BLUE 2	O	Converter Blue output
18	BLUE 1	O	Converter Blue output
19	BLUE 0	O	Converter Blue output
20	GND	–	Ground
21	GND	–	Ground
22	VDD	–	Power supply (3.3V)
23	VDD	–	Power supply (3.3V)
24	GND	–	Ground
25	GND	–	Ground
26	PVD	–	PLL power supply (3.3V)
27	PVD	–	PLL power supply (3.3V)
28	GND	–	Ground
29	COAST	I	PLL COAST signal input
30	HSYNC	I	Horizontal sync. input
31	VSYNC	I	Vertical sync. input
32	GND	–	Ground
33	FILT	–	External filter connection pin for built-in PLL
34	PVD	–	PLL power supply (3.3V)
35	PVD	–	PLL power supply (3.3V)
36	GND	–	Ground
37	MIDSCV	–	Internal middle scale voltage bias
38	CLAMP	I	Clamp input (External clamp signal)
39	VD	–	Analog power supply (3.3V)
40	GND	–	Ground
41	GND	–	Ground
42	VD	–	Analog power supply (3.3V)
43	BAIN	I	Analog input for converter B
44	GND	–	Ground
45	VD	–	Analog power supply (3.3V)

No.	Pin Name	I/O	Pin Function
46	VD	–	Analog power supply (3.3V)
47	GND	–	Ground
48	GAIN	I	Analog input for converter G
49	SOGIN	I	Input for Sync-on Green
50	GND	–	Ground
51	VD	–	Analog power supply (3.3V)
52	VD	–	Analog power supply (3.3V)
53	GND	–	Ground
54	RAIN	I	Analog input for converter R
55	A0	I	Address input 1 of serial port
56	SCL	I	Data clock (max. 100kHz) of serial port
57	SDA	I/O	Data input/output of serial port
58	REF BYPASS	–	Internal reference bypass
59	VD	–	Analog power supply (3.3V)
60	GND	–	Ground
61	GND	–	Ground
62	VD	–	Analog power supply (3.3V)
63	GND	–	Ground
64	VSOUT	O	VSYNC output (phasing with DATACLK)
65	SOGOUT	O	Sync-on-Green slicer output
66	HSOUT	O	HSYNC output (phasing with DATACLK)
67	DATACLK	O	Data input/output clock
68	GND	–	Ground
69	VDD	–	Power supply (3.3V)
70	RED 7	O	Converter Red output (MSB)
71	RED 6	O	Converter Red output
72	RED 5	O	Converter Red output
73	RED 4	O	Converter Red output
74	RED 3	O	Converter Red output
75	RED 2	O	Converter Red output
76	RED 1	O	Converter Red output
77	RED 0	O	Converter Red output
78	VDD	–	Power supply (3.3V)
79	VDD	–	Power supply (3.3V)
80	GND	–	Ground

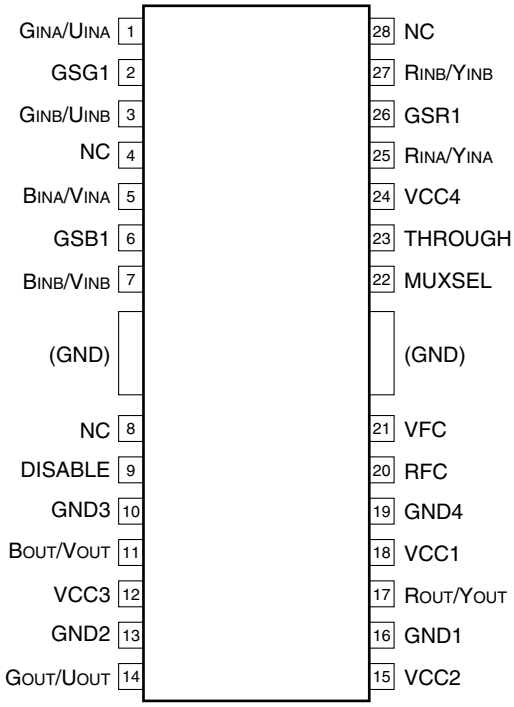
■ SM5301BS (MAIN BOARD ASSY : IC6401, IC6601)

• Video Filter

● Block Diagram



● Pin Arrangement (Top view)



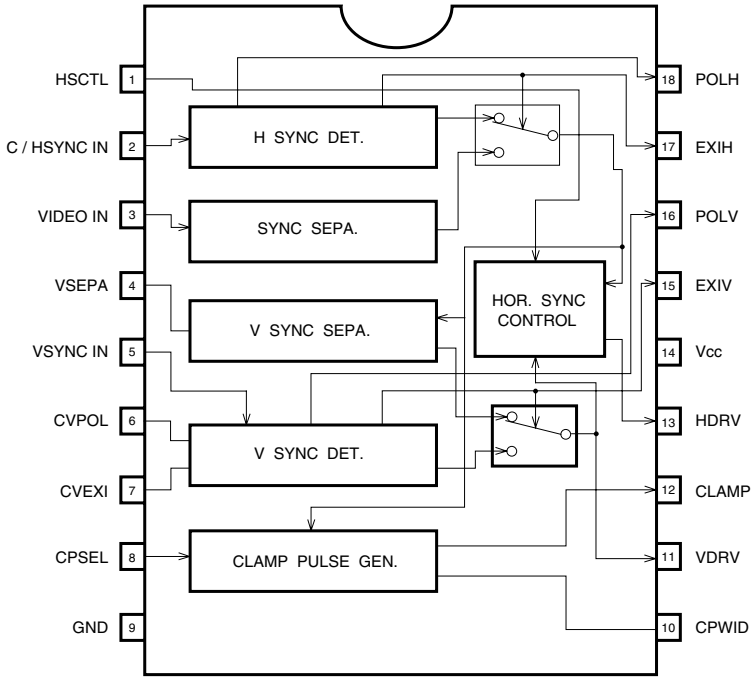
● **Pin Function**

No.	Pin Name	I/O	Pin Function
1	GINA/UINA	I	Analog GINA or UINA signal input. Sync signal is input on SYNCIN pin.
2	GSG1	I	GOUT/UOUT output buffer gain set input
3	GINB/UINB	I	Analog GINB or UINB signal input. Sync signal is input on SYNCIN pin.
4	(NC)	–	No connection
5	BINA/VINA	I	Analog BINA or VINA signal input. Sync signal is input on SYNCIN pin.
6	GSB1	I	BOUT/VOUT output buffer gain set input
7	BINB/VINB	I	Analog BINB or VINB signal input. Sync signal is input on SYNCIN pin.
8	(NC)	–	No connection
9	DISABLE	I	Power save function. Built-in pull-down resistor. L : Enable H : Disable (Output pins: ROUT/YOUT, GOUT/UOUT, and BOUT/VOUT are high impedance.)
10	GND3	–	Analog ground
11	BOUT/VOUT	O	B/V signal output
12	VCC3	–	Analog 5V supply
13	GND2	–	Analog ground
14	GOUT/UOUT	O	G/U signal output
15	VCC2	–	Analog 5V supply
16	GND1	–	Analog ground
17	ROUT/YOUT	O	R/Y signal output
18	VCC1	–	Analog 5V supply
19	GND4	–	Analog ground
20	RFC	–	LPF (lowpass filter) cutoff frequency setting resistor connection
21	VFC	I	LPF (lowpass filter) cutoff frequency setting voltage input
22	MUXSEL	I	Input select signal. Built-in pull-down resistor. L : XINA pin select H : XINB pin select
23	THROUGH	I	Filter through Built-in pull-down resistor. L : Filter function H : Filter through (buffer only)
24	VCC4	–	Analog 5V supply
25	RINA/YINA	I	Analog RINA or YINA signal input. Sync signal is input on SYNCIN pin.
26	GSR1	I	ROUT/YOUT output buffer gain set input
27	RINB/YINB	I	Analog RINB or YINB signal input. Sync signal is input on SYNCIN pin.
28	(NC)	–	No connection

■ BA7078AF (MAIN BOARD ASSY : IC6404, IC6604)

• Multi Sync Separation IC

● Block Diagram



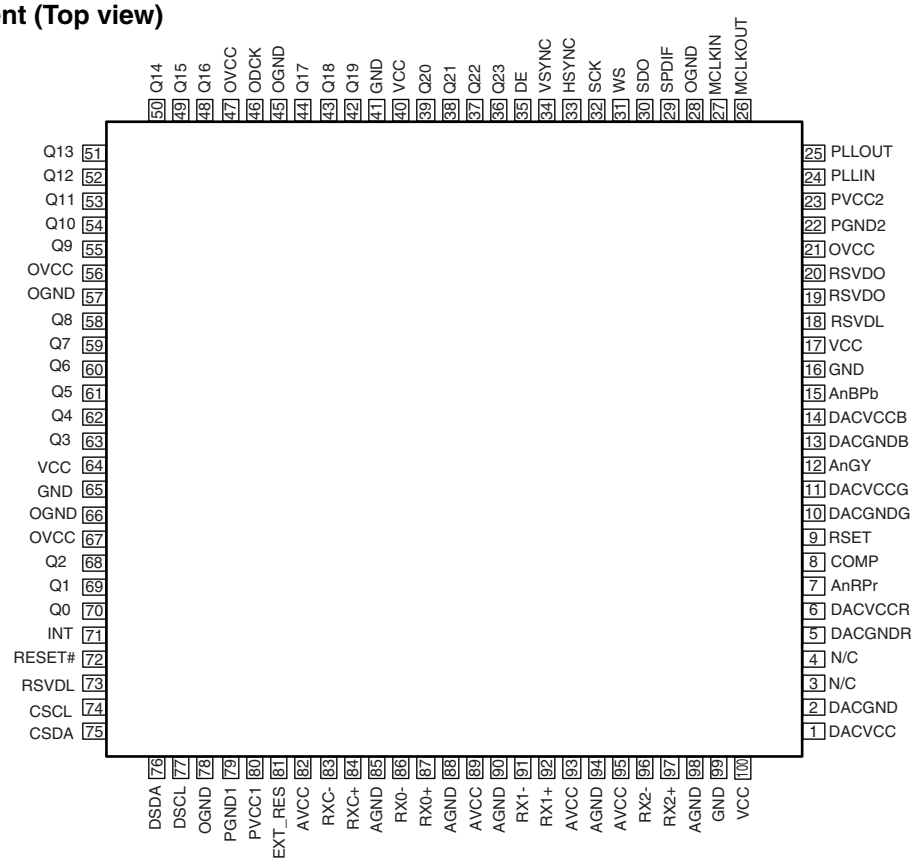
● **Pin Function**

No.	Pin Name	Pin Function
1	HSCTL	HDRV output Used to select whether to output the VDRV section of the HDRV output signal. High : VDRV section of HDRV is output Low : VDRV section of HDRV is not output
2	C/HSYNC IN	Composite sync / H SYNC input Input either the composite synchronization signal or the horizontal synchronization signal. Input is clamped, and is initiated by capacitor coupling.
3	VIDEO IN	SYNC ON VIDEO input Inputs the SYNC ON VIDEO signal(green). Input is sink chip clamped. Input is initiated by capacitor coupling.
4	VSEPA	f-V conversion Converts the horizontal synchronization signal frequency into a voltage. The voltage generated is proportional to the frequency of the horizontal synchronization signal. Attach a 0.56 μF capacitor between the ground pins.
5	VSYNC IN	V SYNC input Inputs the vertical synchronization signal.
6	CVPOL	Vertical polarity integration Integrates the vertical synchronization signal polarity detection circuit. Attach a 1.5 μF capacitor between this pin and the ground.
7	CVEXI	Vertical existence integration Integrates the vertical synchronization signal existence detection circuit. Attach a 1 μF capacitor between this pin and the ground.
8	CPSEL	Setting the clamp position Used to set the clamp pulse generation position to either the front or back edge of HSYNC High : The front edge is the generation position Open : Composite / H SYNC IN : The front edge is the generation position VIDEO IN : The back edge is the generation position Low : The back edge is the generation position
9	GND	Ground
10	CPWID	Setting the clamp pulse width Sets the clamp pulse width according to the attached time constant. Attach a resistor between this pin and VCC and, a capacitor between this pin and GND. When R = 3.9kΩ and C = 100pF, pulse width is approximately 400 ns. Set the resistor to register an abnormality at 1kΩ.
11	VDRV	VDRV output Outputs the vertical synchronization signal. The output signal has positive polarity.
12	CLAMP	Clamp output Outputs the clamp pulse generated from the vertical synchronization signal. The output signal has a positive polarity.
13	HDRV	HDRV output Outputs the clamp pulse generated from the horizontal synchronization signal. The output signal has positive polarity.
14	Vcc	Power supply
15	EXIV	Vertical existence output Indecates whether the vertical synchronization signal exists.
16	POLV	Vertical polarity output Indicates the polarity of the vertical synchronization signal.
17	EXIH	Horizontal existence output Indicates whether the horizontal synchronization signal exists.
18	POLH	Horizontal polarity output Indicates the polarity of the horizontal synchronization signal.

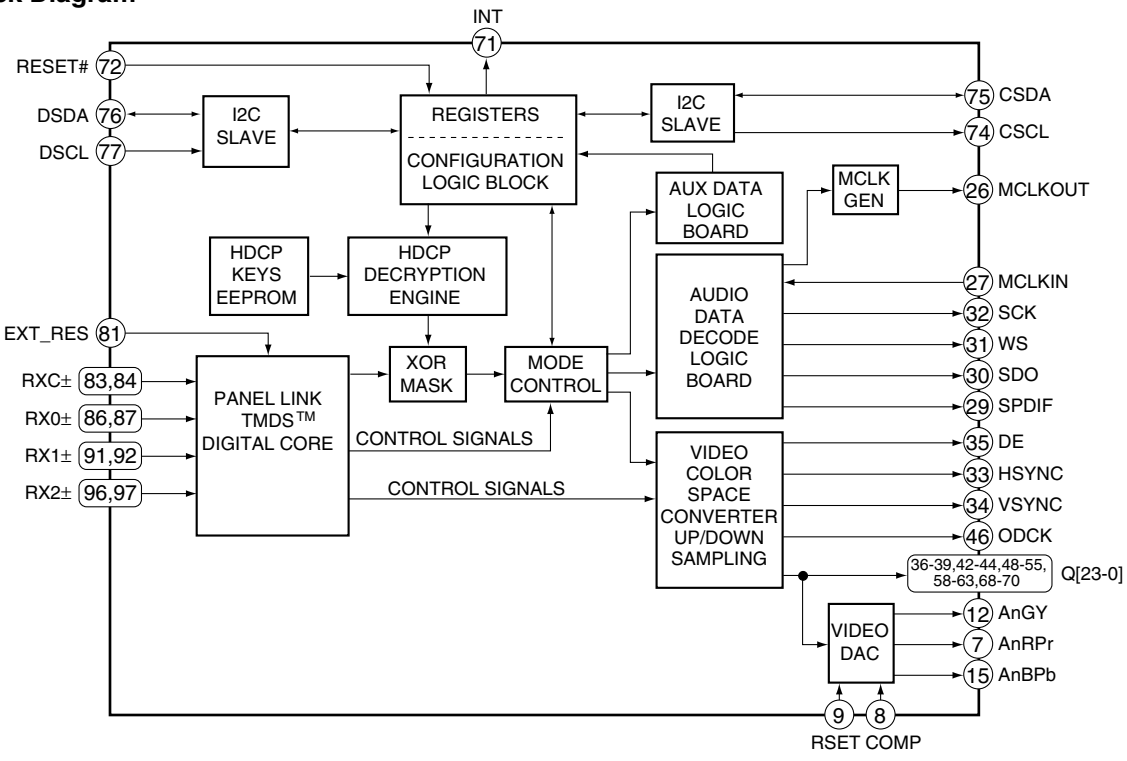
■ SII9993CTG100 (MAIN BOARD ASSY : IC6881)

• HDCP Panel Link Receiver

● Pin Arrangement (Top view)



● Block Diagram



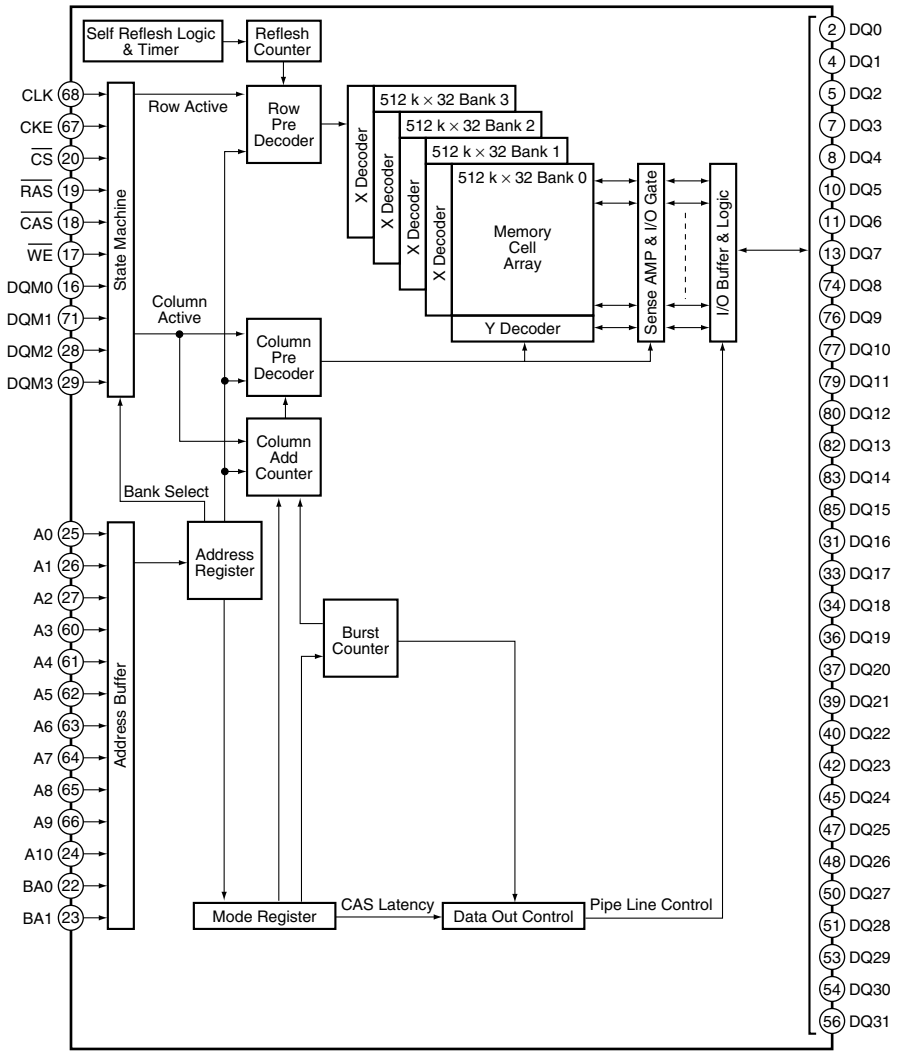
● Pin Function

No.	Pin Name	I/O	Pin Function	No.	Pin Name	I/O	Pin Function
1	DACVCC	–	DAC power supply (3.3V)	51	Q13	O	24-bit output pixel data bus
2	DACGND	–	DAC ground	52	Q12	O	24-bit output pixel data bus
3	N/C	–	No connection	53	Q11	O	24-bit output pixel data bus
4	N/C	–	No connection	54	Q10	O	24-bit output pixel data bus
5	DACGNDR	–	DAC Red ground	55	Q9	O	24-bit output pixel data bus
6	DACVCCR	–	DAC Red power supply (3.3V)	56	OVCC	–	Output bus power supply (3.3V)
7	AnRPr	O	Red, Pr output of analog video	57	OGND	–	Output bus ground
8	COMP	I	For reference amp. correction of DAC inside	58	Q8	O	24-bit output pixel data bus
9	RSET	I	Full scale adjustment resistor input	59	Q7	O	24-bit output pixel data bus
10	DACGNDG	–	DAC Green ground	60	Q6	O	24-bit output pixel data bus
11	DACVCCG	–	DAC Green power supply (3.3V)	61	Q5	O	24-bit output pixel data bus
12	AnGY	O	Green, Y output of analog video	62	Q4	O	24-bit output pixel data bus
13	DACGNDB	–	DAC Blue ground	63	Q3	O	24-bit output pixel data bus
14	DACVCCB	–	DAC Blue power supply (3.3V)	64	VCC	–	Digital power supply (3.3V)
15	AnBPb	O	Blue, Pb output of analog video	65	GND	–	Digital ground
16	GND	–	Digital ground	66	OGND	–	Output bus ground
17	VCC	–	Digital power supply (3.3V)	67	OVCC	–	Output bus power supply (3.3V)
18	RSVDL	I	Reserved Fixed to low.	68	Q2	O	24-bit output pixel data bus
19	RSVDD	O	Reserved No connection	69	Q1	O	24-bit output pixel data bus
20	RSVDD	O	Reserved No connection	70	Q0	O	24-bit output pixel data bus
21	OVCC	–	Output bus power supply (3.3V)	71	INT	O	Interruption output
22	PGND2	–	Audio PLL ground	72	RESET#	I	Reset Activ low.
23	PVCC2	–	Audio PLL power supply (3.3V)	73	RSVDL	I	Reserved Fixed to low.
24	PLLIN	I/O	PLL filter input	74	CSCL	I	Configuration I2C clock
25	PLLOUT	I/O	PLL filter output	75	CSDA	I/O	Configuration I2C data
26	MCCLKOUT	O	Audio master clock output	76	DSDA	I/O	DDC I2C data
27	MCCLKIN	I	Reference audio master clock input	77	DSCL	I	DDC I2C clock
28	OGND	–	Output bus ground	78	OGND	–	Output bus ground
29	SPDIF	O	SPDIF audio output	79	PGND1	–	PLL ground
30	SDO	O	I2S serial data output	80	PVCC1	–	PLL power supply (3.3V)
31	WS	O	I2S word selecting output	81	EXT_RES	I	Input impedance adjustment
32	SCK	O	I2S serial clock output	82	AVCC	–	Analog power supply (3.3V)
33	HSYNC	O	Horizontal sync. control signal output	83	RXC-	I	TMDS data input
34	VSYNC	O	Vertical sync. control signal output	84	RXC+	I	TMDS data input
35	DE	O	Data enable	85	AGND	–	Analog ground
36	Q23	O	24-bit output pixel data bus	86	RX0-	I	TMDS data input
37	Q22	O	24-bit output pixel data bus	87	RX0+	I	TMDS data input
38	Q21	O	24-bit output pixel data bus	88	AGND	–	Analog ground
39	Q20	O	24-bit output pixel data bus	89	AVCC	–	Analog power supply (3.3V)
40	VCC	–	Digital power supply (3.3V)	90	AGND	–	Analog ground
41	GND	–	Digital ground	91	RX1-	I	TMDS data input
42	Q19	O	24-bit output pixel data bus	92	RX1+	I	TMDS data input
43	Q18	O	24-bit output pixel data bus	93	AVCC	–	Analog power supply (3.3V)
44	Q17	O	24-bit output pixel data bus	94	AGND	–	Analog ground
45	OGND	–	Output bus ground	95	AVCC	–	Analog power supply (3.3V)
46	ODCK	O	Data clock output	96	RX2-	I	TMDS data input
47	OVCC	–	Output bus power supply (3.3V)	97	RX2+	I	TMDS data input
48	Q16	O	24-bit output pixel data bus	98	AGND	–	Analog ground
49	Q15	O	24-bit output pixel data bus	99	GND	–	Digital ground
50	Q14	O	24-bit output pixel data bus	100	VCC	–	Digital power supply (3.3V)

■ HY57V643220CT-7 (MAIN BOARD ASSY : IC7001, IC7002) (or K4S643232H-TC60-K)

• Synchronous DRAM

● Block Diagram



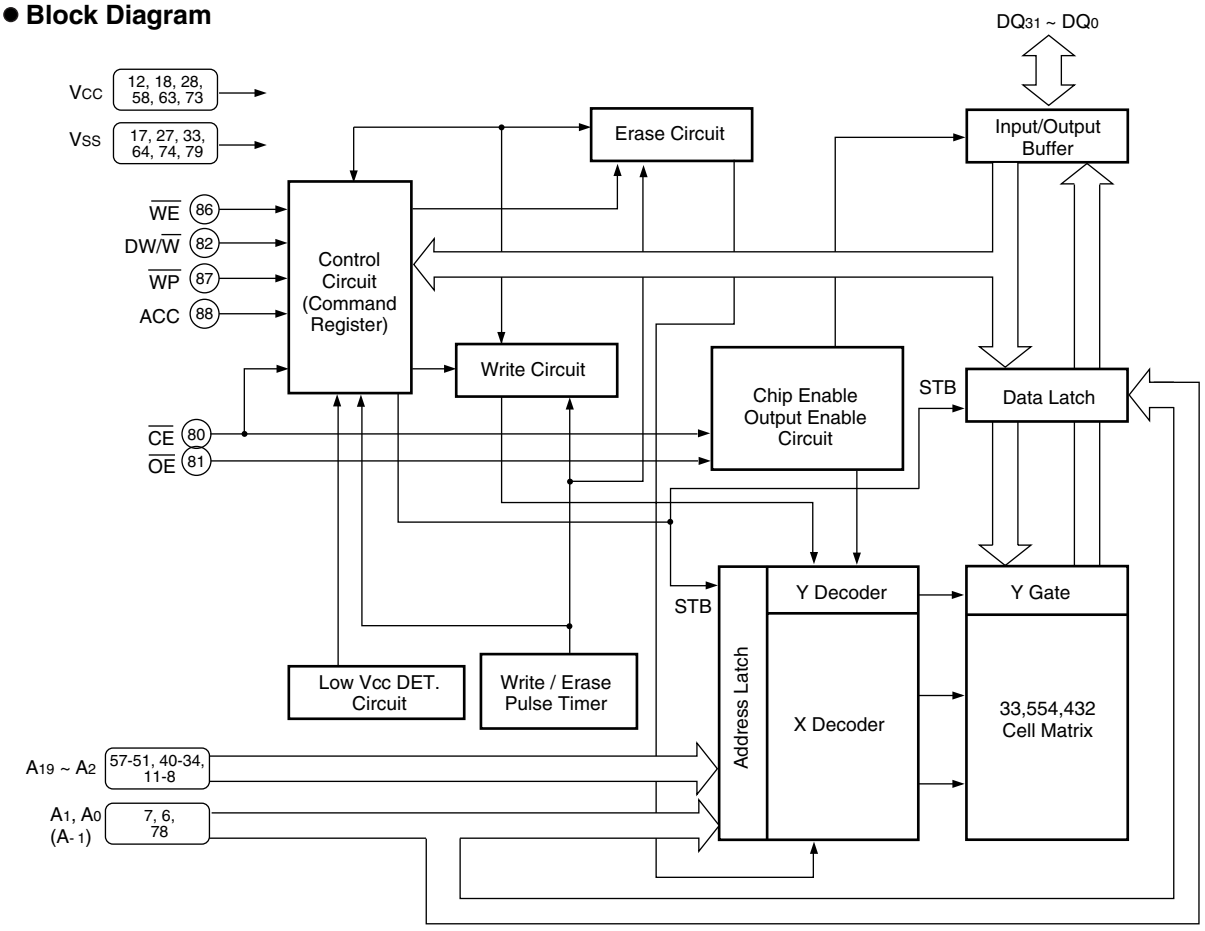
● Pin Function

No.	Pin Name	I/O	Pin Function	No.	Pin Name	I/O	Pin Function
1	VDD	–	Power supply	44	VSS	–	Ground
2	DQ0	I/O	Data input/output	45	DQ24	I/O	Data input/output
3	VDDQ	–	Power supply for output buffer	46	VSSQ	–	Ground for output buffer
4	DQ1	I/O	Data input/output	47	DQ25	I/O	Data input/output
5	DQ2	I/O	Data input/output	48	DQ26	I/O	Data input/output
6	VSSQ	–	Ground for output buffer	49	VDDQ	–	Power supply for output buffer
7	DQ3	I/O	Data input/output	50	DQ27	I/O	Data input/output
8	DQ4	I/O	Data input/output	51	DQ28	I/O	Data input/output
9	VDDQ	–	Power supply for output buffer	52	VSSQ	–	Ground for output buffer
10	DQ5	I/O	Data input/output	53	DQ29	I/O	Data input/output
11	DQ6	I/O	Data input/output	54	DQ30	I/O	Data input/output
12	VSSQ	–	Ground for output buffer	55	VDDQ	–	Power supply for output buffer
13	DQ7	I/O	Data input/output	56	DQ31	I/O	Data input/output
14	NC	–	No connection	57	NC	–	No connection
15	VDD	–	Power supply	58	VSS	–	Ground
16	DQM0	I	Data input/output mask	59	DQM3	I	Data input/output mask
17	/WE	I	Write enable	60	A3	I	Address input
18	/CAS	I	Column address strobe	61	A4	I	Address input
19	/RAS	I	Row address strobe	62	A5	I	Address input
20	/CS	I	Chip select input	63	A6	I	Address input
21	NC	–	No connection	64	A7	I	Address input
22	BA0	I	Bank address input	65	A8	I	Address input
23	BA1	I	Bank address input	66	A9	I	Address input
24	A10/AP	I	Address input	67	CKE	I	Clock enable
25	A0	I	Address input	68	CLK	I	System clock input
26	A1	I	Address input	69	NC	–	No connection
27	A2	I	Address input	70	NC	–	No connection
28	DQM2	I	Data input/output mask	71	DQM1	I	Data input/output mask
29	VDD	–	Power supply	72	VSS	–	Ground
30	NC	–	No connection	73	NC	–	No connection
31	DQ16	I/O	Data input/output	74	DQ8	I/O	Data input/output
32	VSSQ	–	Ground for output buffer	75	VDDQ	–	Power supply for output buffer
33	DQ17	I/O	Data input/output	76	DQ9	I/O	Data input/output
34	DQ18	I/O	Data input/output	77	DQ10	I/O	Data input/output
35	VDDQ	–	Power supply for output buffer	78	VSSQ	–	Ground for output buffer
36	DQ19	I/O	Data input/output	79	DQ11	I/O	Data input/output
37	DQ20	I/O	Data input/output	80	DQ12	I/O	Data input/output
38	VSSQ	–	Ground for output buffer	81	VDDQ	–	Power supply for output buffer
39	DQ21	I/O	Data input/output	82	DQ13	I/O	Data input/output
40	DQ22	I/O	Data input/output	83	DQ14	I/O	Data input/output
41	VDDQ	–	Power supply for output buffer	84	VSSQ	–	Ground for output buffer
42	DQ23	I/O	Data input/output	85	DQ15	I/O	Data input/output
43	VDD	–	Power supply	86	VSS	–	Ground

■ MBM29PL3200BE70PFV (MAIN BOARD ASSY : IC7152)

• Page Mode Flash Memory

● Block Diagram



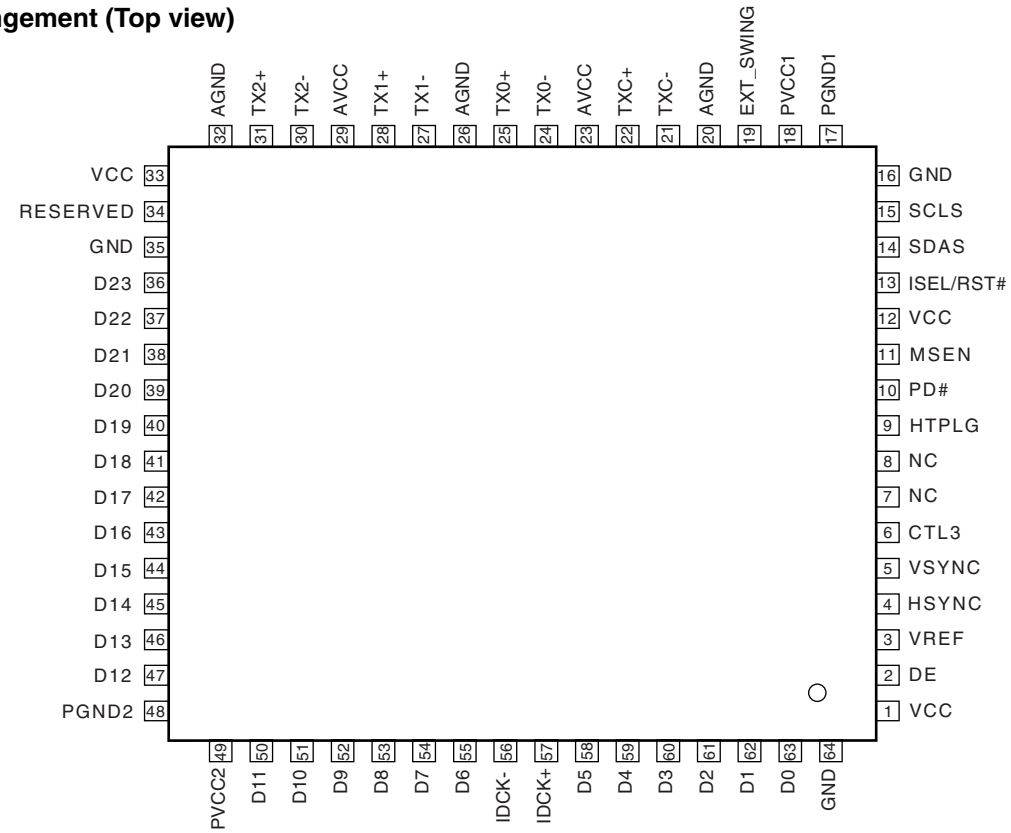
● Pin Function

No.	Pin Name	I/O	Pin Function
57-51, 40-34, 11-6, 78	A_{19} - A_0, A_{-1}	I	Address input
78-75, 72-65, 62-59, 32-19, 26-19, 16-13	DQ_{31} - DQ_0	I/O	Data input/output
80	CE	I	Chip enable
81	OE	I	Output enable
86	WE	I	Write enable
82	DW/W	I	16 bit, 32 bit mode switch
87	WP	I	Write protect
88	ACC	I	Acceleration
17, 27, 33, 64, 74, 79	V_{SS}	–	Ground
12, 18, 28, 58, 63, 73	V_{CC}	–	Power supply
1-5, 41-50, 83-85, 89, 90	N.C.	–	No connection

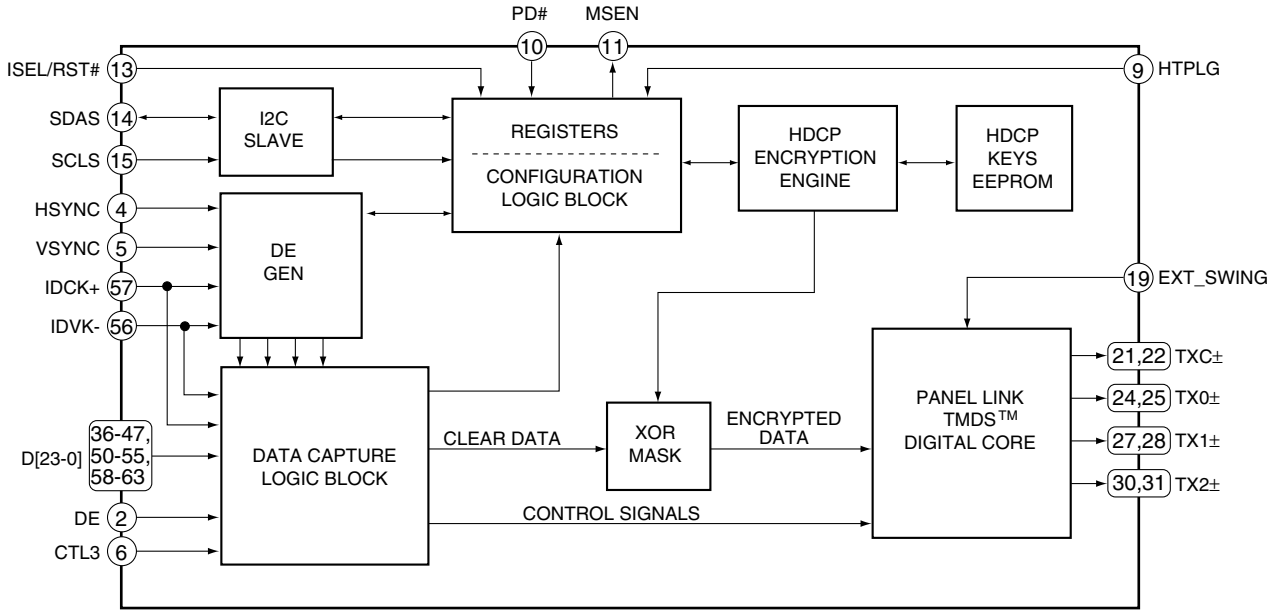
■ SII170BCLG64 (MAIN BOARD ASSY : IC7401)

• HDCP Panel Link Transmitter

● Pin Arrangement (Top view)



● Block Diagram



● Pin Function

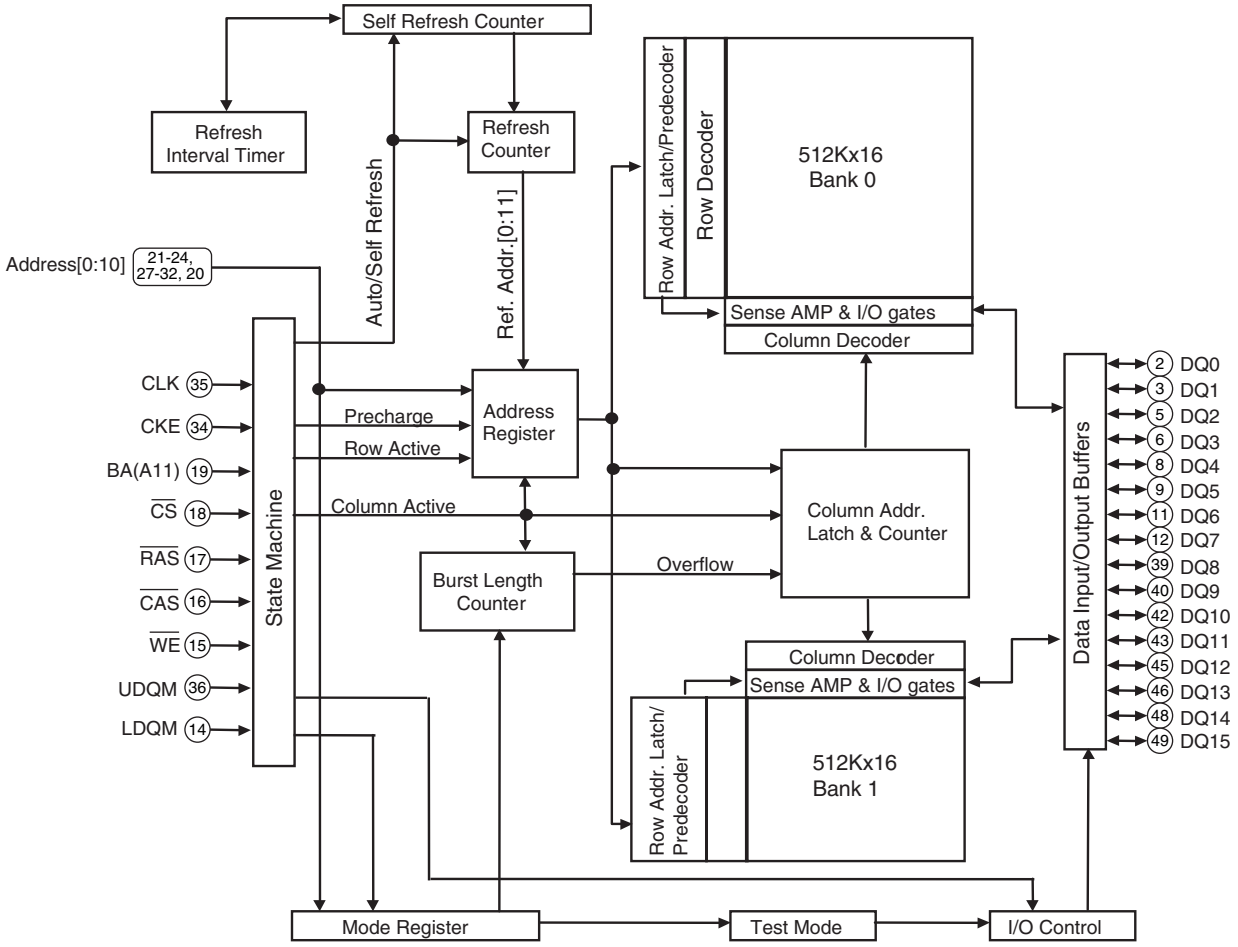
No.	Pin Name	I/O	Pin Function
1	VCC	–	Digital power supply (3.3V)
2	DE	I	Data enable
3	VREF	I	3.3V fixed
4	HSYNC	I	Horizontal sync. control signal input
5	VSYNC	I	Vertical sync. control signal input
6	CTL3	I	External CTL3 input
7	NC	–	No connection
8	NC	–	No connection
9	HTPLG	I	Monitor chrage input
10	PD#	I	Power down input (Active low)
11	MSEN	O	Monitor sense output (open-collector output)
12	VCC	–	Digital power supply (3.3V)
13	ISEL/RST#	I	I2C interface selecting input High: I2C interface is active
14	SDAS	I/O	DDC I2C data input/output
15	SCLS	I	DDC I2C clock input
16	GND	–	Digital ground
17	PGND1	–	PLL analog ground
18	PVCC1	–	Analog power supply for PLL of primary side (3.3V)
19	EXT_SWING	I	Voltage regulation adjustment
20	AGND	–	Analog ground
21	TXC-	O	Differential signal clock output of TMDS Low voltage
22	TXC+	O	Differential signal clock output of TMDS Low voltage
23	AVCC	–	Analog power supply (3.3V)
24	TX0-	O	Differential signal clock output of TMDS Low voltage
25	TX0+	O	Differential signal clock output of TMDS Low voltage
26	AGND	–	Analog ground
27	TX1-	O	Differential signal clock output of TMDS Low voltage
28	TX1+	O	Differential signal clock output of TMDS Low voltage
29	AVCC	–	Analog power supply (3.3V)
30	TX2-	O	Differential signal clock output of TMDS Low voltage
31	TX2+	O	Differential signal clock output of TMDS Low voltage
32	AGND	–	Analog ground
33	VCC	–	Digital power supply (3.3V)
34	RESERVED	I	Reserved pin for Silicon Image Normally, fixed to low.
35	GND	–	Digital ground
36	D23	I	24-bit pixel bus input
37	D22	I	24-bit pixel bus input
38	D21	I	24-bit pixel bus input
39	D20	I	24-bit pixel bus input
40	D19	I	24-bit pixel bus input
41	D18	I	24-bit pixel bus input
42	D17	I	24-bit pixel bus input
43	D16	I	24-bit pixel bus input
44	D15	I	24-bit pixel bus input
45	D14	I	24-bit pixel bus input

No.	Pin Name	I/O	Pin Function
46	D13	I	24-bit pixel bus input
47	D12	I	24-bit pixel bus input
48	PGND2	–	PLL analog ground
49	PVCC2	–	Analog power supply for filter PLL (3.3V)
50	D11	I	24-bit / 12-bit pixel bus input
51	D10	I	24-bit / 12-bit pixel bus input
52	D9	I	24-bit / 12-bit pixel bus input
53	D8	I	24-bit / 12-bit pixel bus input
54	D7	I	24-bit / 12-bit pixel bus input
55	D6	I	24-bit / 12-bit pixel bus input
56	IDCK-	I	Data clock - input
57	IDCK+	I	Data clock + input
58	D5	I	24-bit / 12-bit pixel bus input
59	D4	I	24-bit / 12-bit pixel bus input
60	D3	I	24-bit / 12-bit pixel bus input
61	D2	I	24-bit / 12-bit pixel bus input
62	D1	I	24-bit / 12-bit pixel bus input
63	D0	I	24-bit / 12-bit pixel bus input
64	GND	–	Digital ground

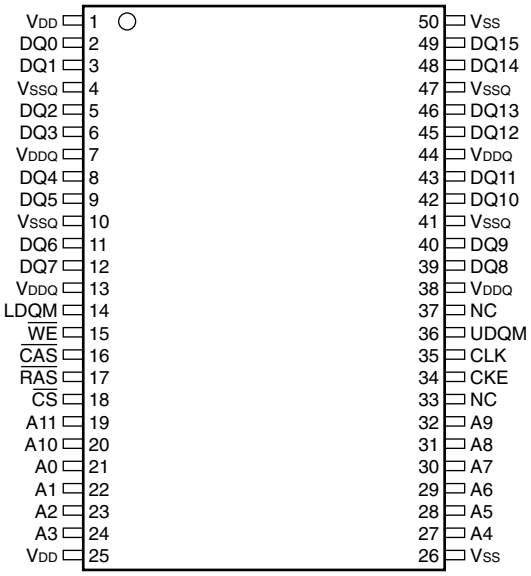
■ HY57V161610ETP-8-K (MAIN BOARD ASSY : IC6106)

• 16M SDRAM

● Block Diagram



● Pin Arrangement (Top view)



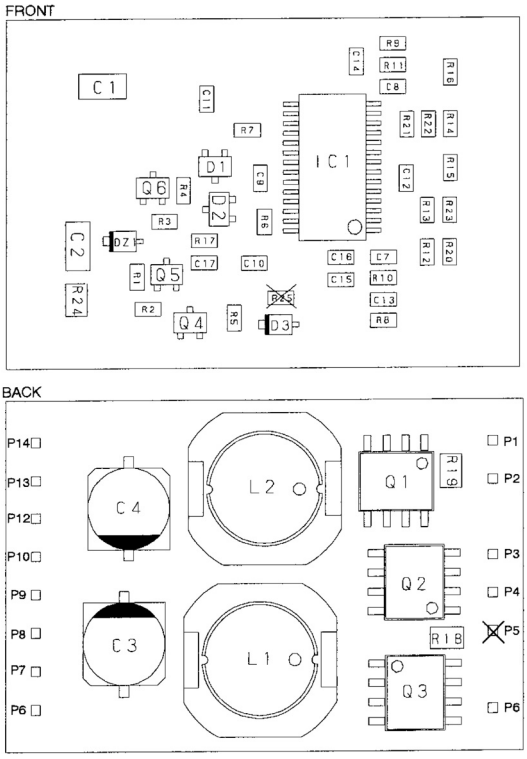
● Pin Function

No.	Pin Name	I/O	Pin Function
1	VDD	–	Power supply
2	DQ0	I/O	Data input/output
3	DQ1	I/O	Data input/output
4	VSSQ	–	Ground for DQ
5	DQ2	I/O	Data input/output
6	DQ3	I/O	Data input/output
7	VDDQ	–	Power supply for DQ
8	DQ4	I/O	Data input/output
9	DQ5	I/O	Data input/output
10	VSSQ	–	Ground for DQ
11	DQ6	I/O	Data input/output
12	DQ7	I/O	Data input/output
13	VDDQ	–	Power supply for DQ
14	LDQM	I	Data input/output mask
15	/WE	I	Write enable
16	/CAS	I	Column address strobe
17	/RAS	I	Row address strobe
18	/CS	I	Chip select input
19	A11	I	Address input
20	A10	I	Address input
21	A0	I	Address input
22	A1	I	Address input
23	A2	I	Address input
24	A3	I	Address input
25	VDD	–	Power supply
26	VSS	–	Ground
27	A4	I	Address input
28	A5	I	Address input
29	A6	I	Address input
30	A7	I	Address input
31	A8	I	Address input
32	A9	I	Address input
33	NC	–	No connection
34	CKE	I	Clock enable
35	CLK	I	System clock input
36	UDQM	I	Data input/output mask
37	NC	–	No connection
38	VDDQ	–	Power supply for DQ
39	DQ8	I/O	Data input/output
40	DQ9	I/O	Data input/output
41	VSSQ	–	Ground for DQ
42	DQ10	I/O	Data input/output
43	DQ11	I/O	Data input/output
44	VDDQ	–	Power supply for DQ
45	DQ12	I/O	Data input/output
46	DQ13	I/O	Data input/output
47	VSSQ	–	Ground for DQ
48	DQ14	I/O	Data input/output
49	DQ15	I/O	Data input/output
50	VSS	–	Ground

■ AXY1088 (AV BOARD ASSY : U8502)

• DC-DC Converter Unit

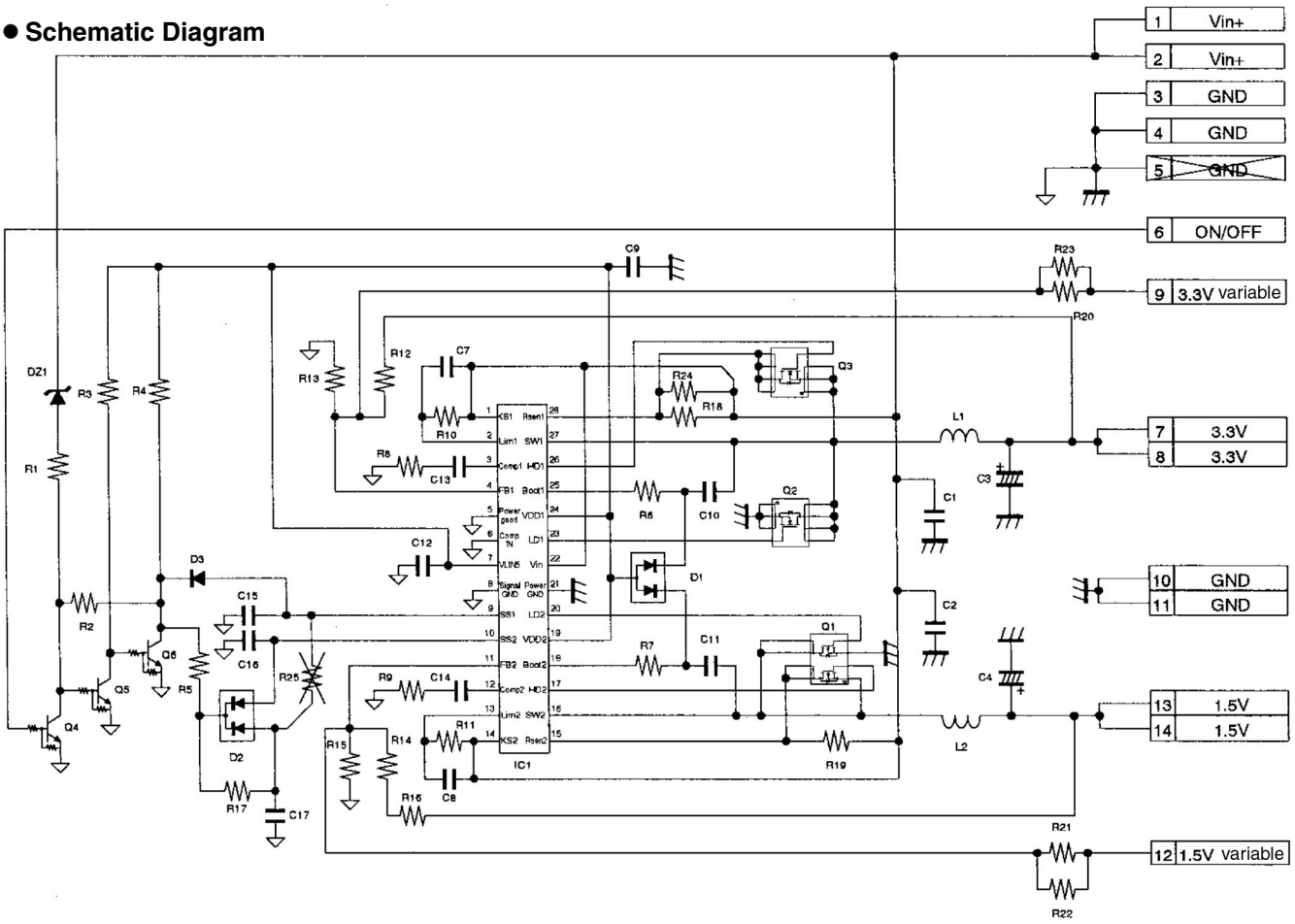
● Pin Arrangement (Top view)



● Pin Function

No.	Pin Name	Pin Function
1	Vin	12V input
2	Vin	12V input
3	GND	Input side GND
4	GND	Input side GND
5	Omission terminal	Omission terminal
6	ON/OFF	Output ON/OFF
7	Vo1	3.3V output
8	Vo1	3.3V output
9	Vo1adj	3.3V variable output
10	GND	GND
11	GND	GND
12	Vo2adj	1.5V variable output
13	Vo2	1.5V output
14	Vo2	1.5V output

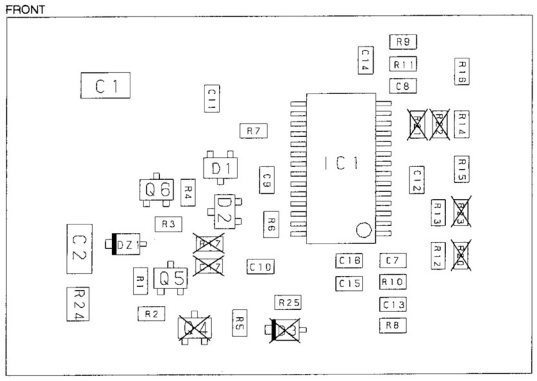
● Schematic Diagram



■ AXY1089 (AV BOARD ASSY : U8504)

• DC-DC Converter Unit

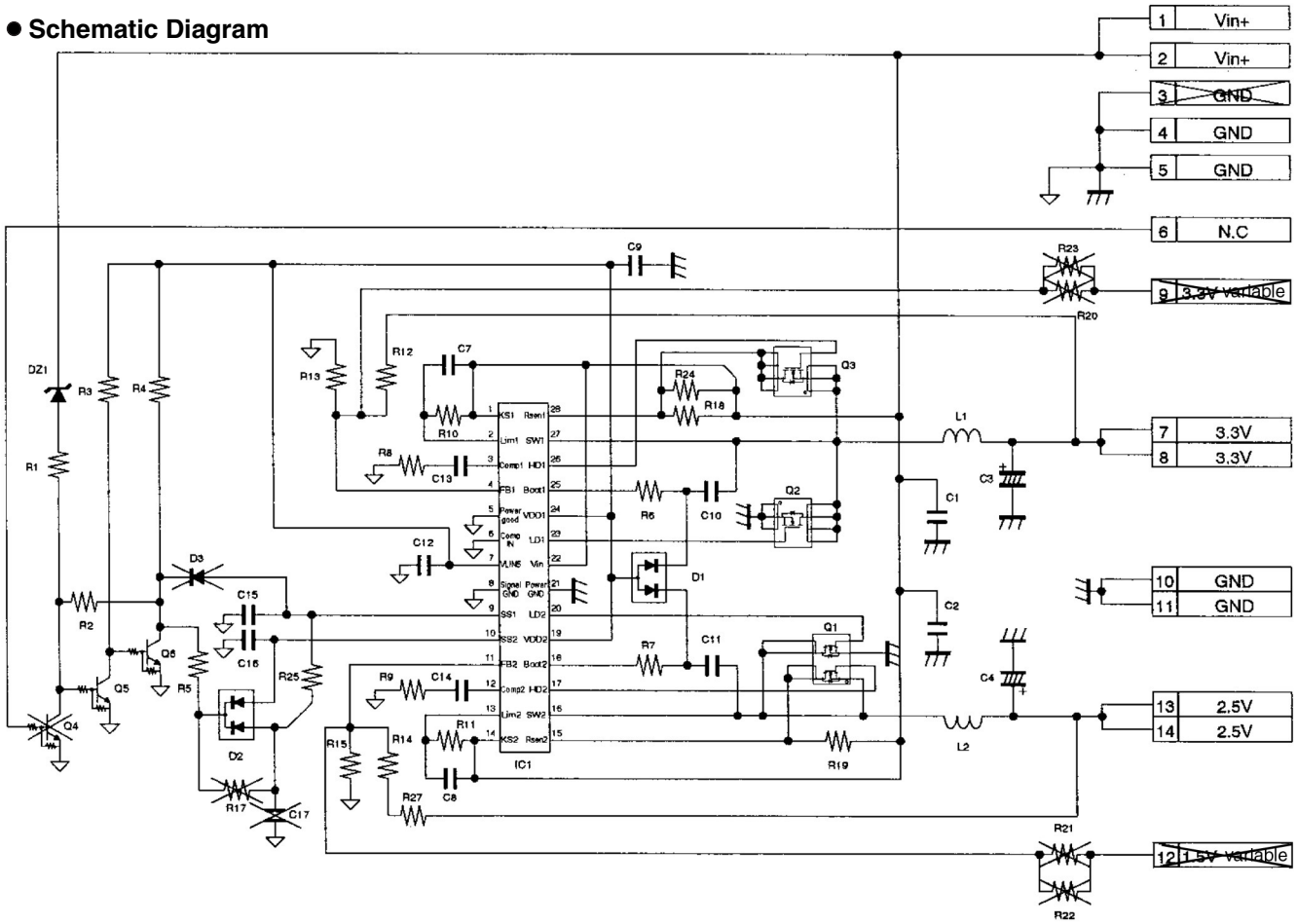
● Pin Arrangement (Top view)



● Pin Function

No.	Pin Name	Pin Function
1	Vin	6.5V input
2	Vin	6.5V input
3	Omission terminal	Omission terminal
4	GND	Input side GND
5	GND	Input side GND
6	N.C	N.C
7	Vo1	3.3V output
8	Vo1	3.3V output
9	Omission terminal	Omission terminal
10	GND	GND
11	GND	GND
12	Omission terminal	Omission terminal
13	Vo2	2.5V output
14	Vo2	2.5V output

● Schematic Diagram

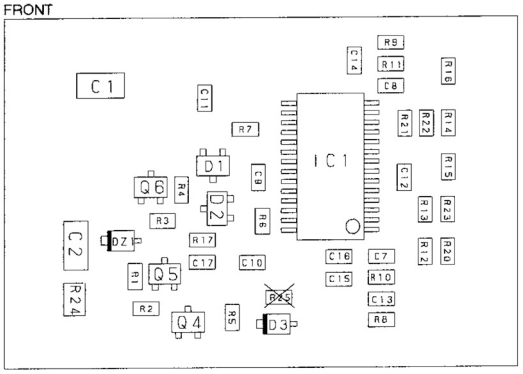


■ AXY1121 (AV BOARD ASSY : U8503)

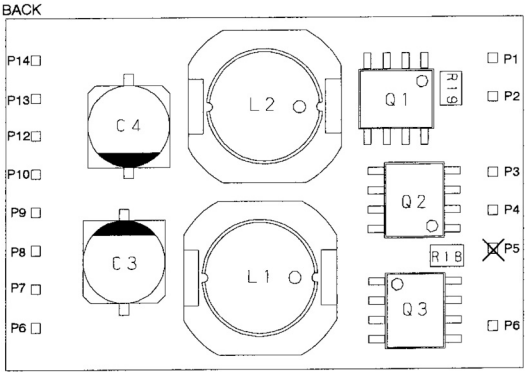
• DC-DC Converter Unit

● Pin Arrangement (Top view)

FRONT



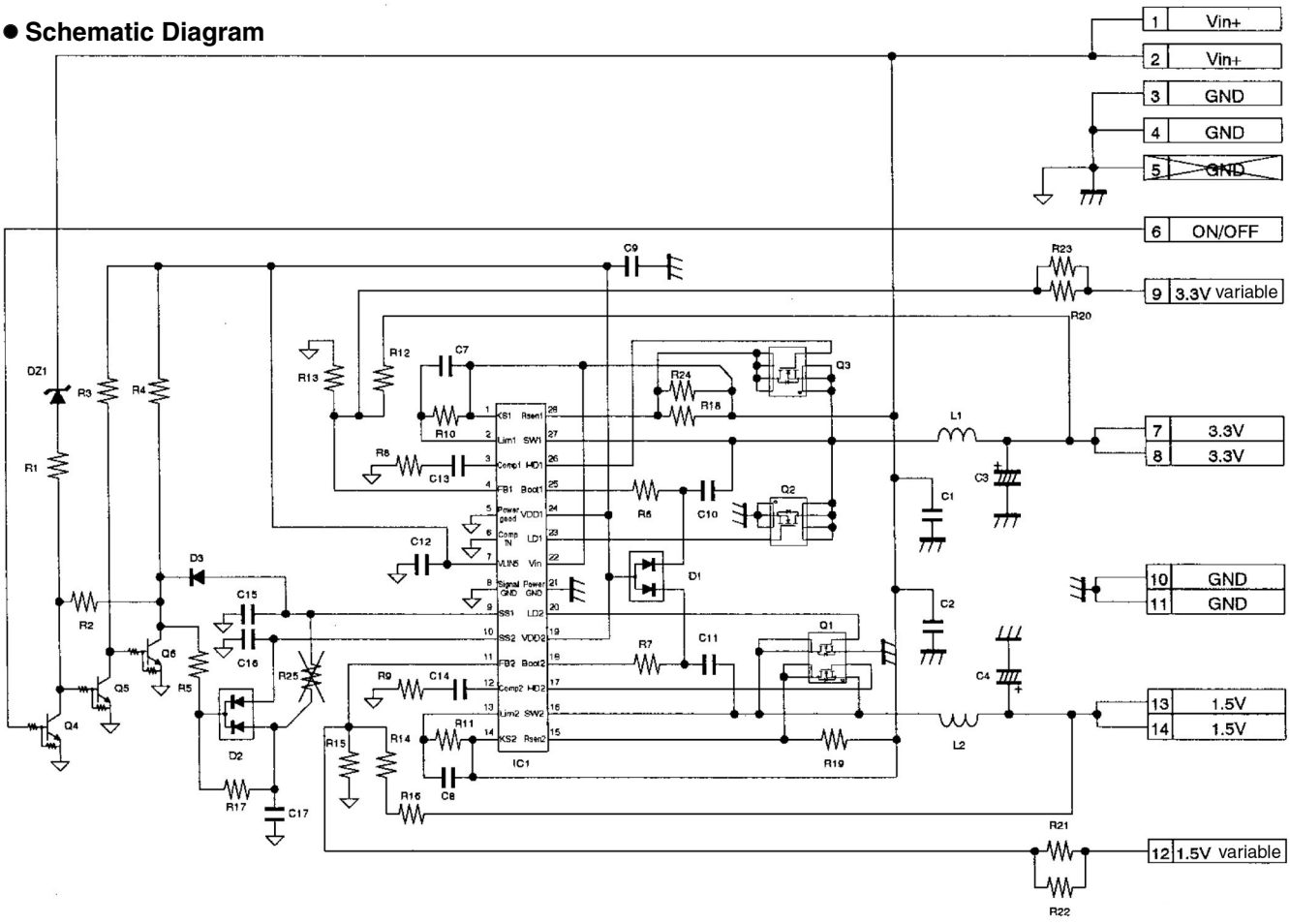
BACK



● Pin Function

No.	Pin Name	Pin Function
1	Vin	12V input
2	Vin	12V input
3	GND	Input side GND
4	GND	Input side GND
5	Omission terminal	Omission terminal
6	ON/OFF	Output ON/OFF
7	Vo1	3.3V output
8	Vo1	3.3V output
9	Vo1adj	3.3V variable output
10	GND	GND
11	GND	GND
12	Vo2adj	1.5V variable output
13	Vo2	1.5V output
14	Vo2	1.5V output

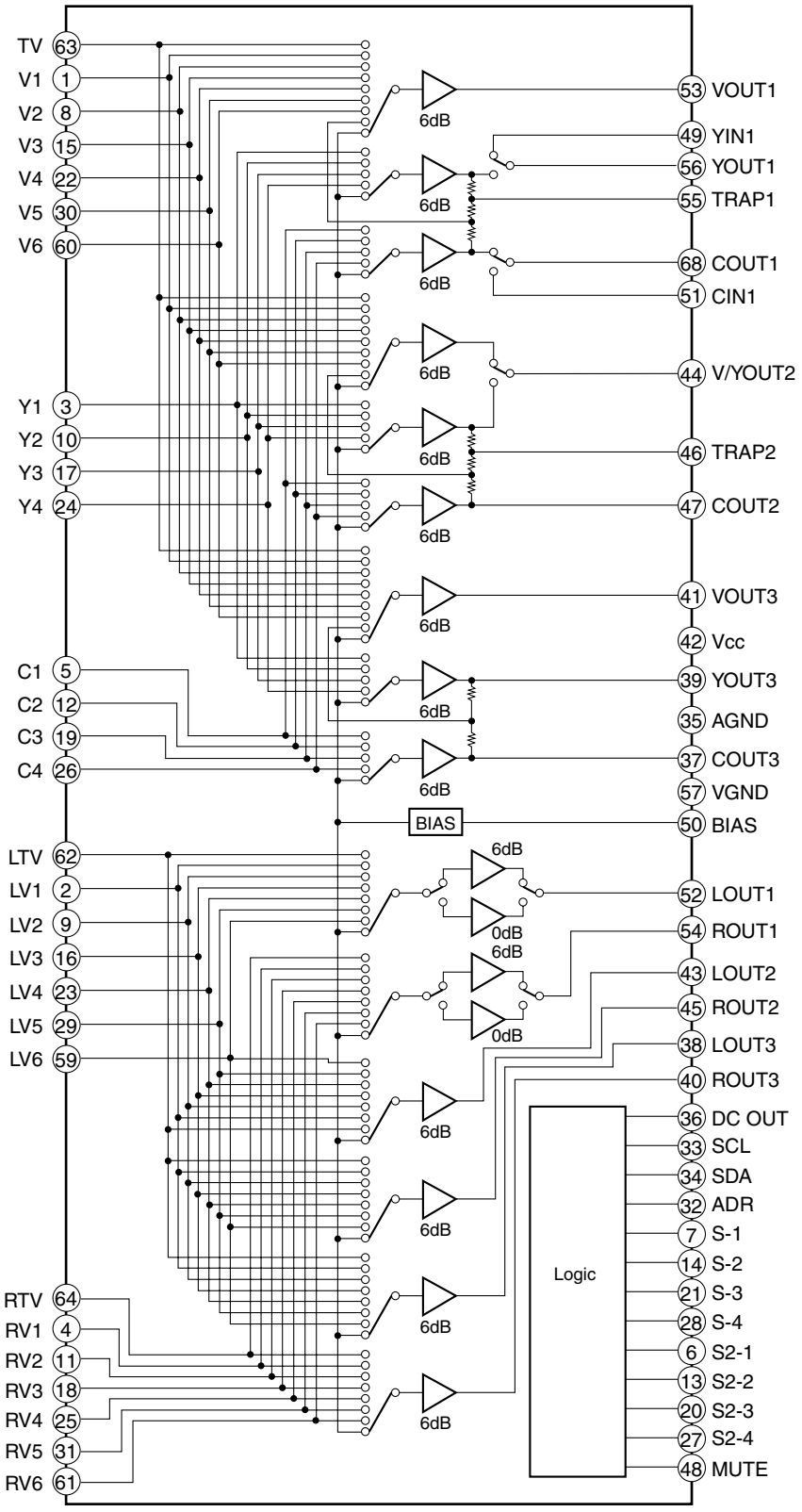
● Schematic Diagram



■ CXA2069Q (AV BOARD ASSY : IC8002)

• 7-Input 3-Output Audio/Video Switch

● Block Diagram



● Pin Function

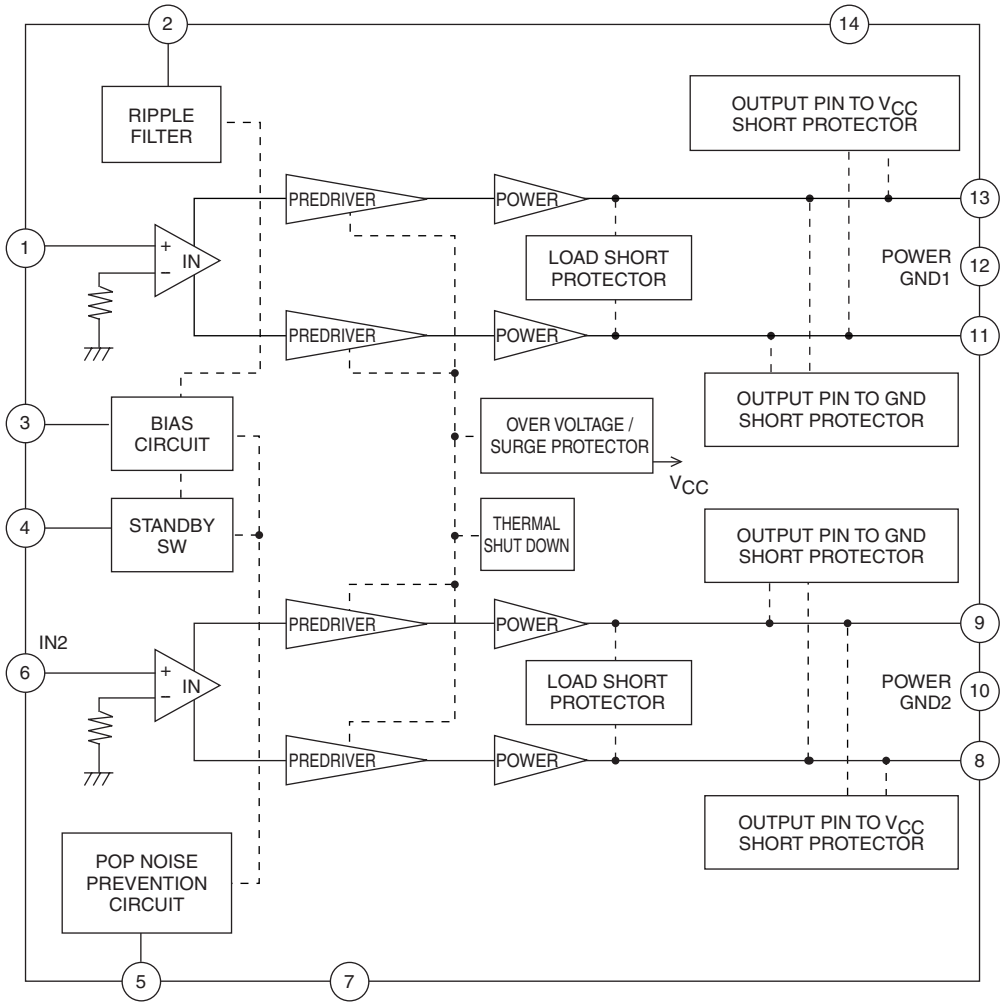
No.	Pin Name	I/O	Pin Function
63 1 8 15 22 30 60	TV V1 V2 V3 V4 V5 V6	I	Video signal inputs. Input composite video signals.
3 10 17 24 49	Y1 Y2 Y3 Y4 YIN1	I	Y/C separation signal inputs. Input luminance signals. The YIN1 pin inputs the signal obtained by Y/C separating the VOUT1 pin output.
5 12 19 26 51	C1 C2 C3 C4 CIN1	I	Y/C separation signal inputs. Input chrominance signals. The CIN1 pin inputs the signal obtained by Y/C separating the VOUT1 pin output.
62, 2 9, 16 23, 29 59, 64 4, 11 18, 25 31, 61	LTV, LV1 LV2, LV3 LV4, LV5 LV6, RTV RV1, RV2 RV3, RV4 RV5, RV6	I	Audio signal inputs.
53 41	VOUT1 VOUT3	O	Video signal outputs. Output composite video signals.
44	V/YOUT2	O	Video signal output. Either composite video signal output or luminance signal output can be selected by I2C bus control.
56 39	YOUT1 YOUT3	O	Video signal outputs. Output luminance signals.
58 47 37	COUT1 COUT2 COUT3	O	Video signal outputs. Output chrominance signals.
52 43 38 54 45 40	LOUT1 LOUT2 LOUT3 ROUT1 ROUT2 ROUT3	O	Audio signal outputs. Zo=50 ohm (within DC ± 2mA)
6 13 20 27	S2-1 S2-2 S2-3 S2-4	–	Detects the S2-compatible DC superimposed onto the C signal. 4 : 3 video signal at 1.3 V or less 4 : 3 letter-box signal at 1.3 V or more to 2.5 V or less 16 : 9 picture squeezed signal at 2.5 V or more This pin is pulled down to GND by a 100 k ohm resistor, so the 4 : 3 video signal is selected when open.

No.	Pin Name	I/O	Pin Function
7 14 21 28	S-1 S-2 S-3 S-4	–	Composite video/S selector. The detection results are written to the status register. S signal at 3.5 V or less. Composite video signal at 3.5 V or more. This pin is pulled up to 5 V by a 100 k ohm resistor, so the composite video signal is selected when open.
32	ADR	–	Selects the slave address for the I2C bus. 90H at 1.5 V or less 92H at 2.5 V or more 90H when open.
33	SCL	I	I2C bus signal input VILmax=1.5 V VIHmin=3.0 V
34	SDA	I	I2C bus signal input VILmax=1.5 V VIHmin=3.0 V VOLmax=0.4 V
36	DC_OUT	O	Outputs the S2-compatible DC superimposed onto the COUT3 output. The DC is superimposed by connecting this pin to the COUT3 output via a capacitor. Control is performed by the I2C bus. When 0 V is output, Q1 is ON and the impedance is 5 k ohm. S2 protocol output impedance of 10 ± 3 k ohm is realized by attaching external resistance of 4.7 k ohm. DC_OUT (bus) Output DC 0 4.5 V 1 0 V 2 1.9 V 3 4.5 V
55 46	TRAP1 TRAP2	–	Connects trap circuit for subcarrier.
48	MUTE	–	Audio signal output mute. Mute OFF at 1.5 V or less Mute ON at 2.5 V or more Mute OFF when open.
50	BIAS	–	Internal reference bias (VCC/2). Connect to GND via a capacitor.

■ LA4625 (AUDIO AMP ASSY: IC3504)

• 2ch BTL AF Power Amp IC

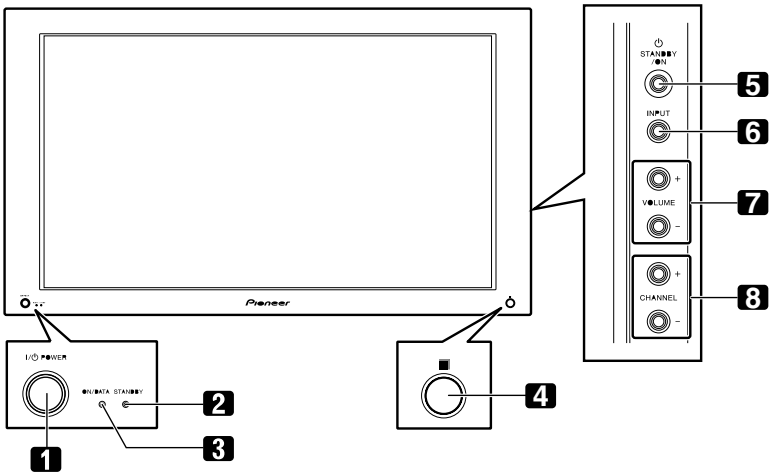
● Block Diagram



8. PANEL FACILITIES AND SPECIFICATIONS

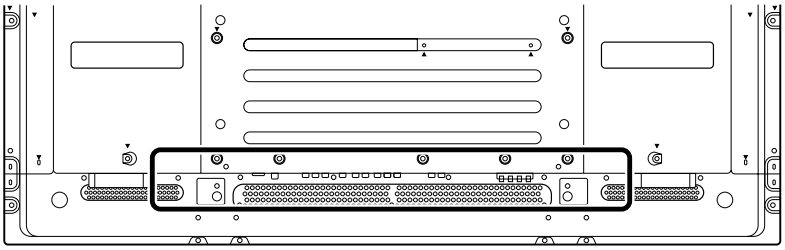
Plasma Display

Front view **(right view)**

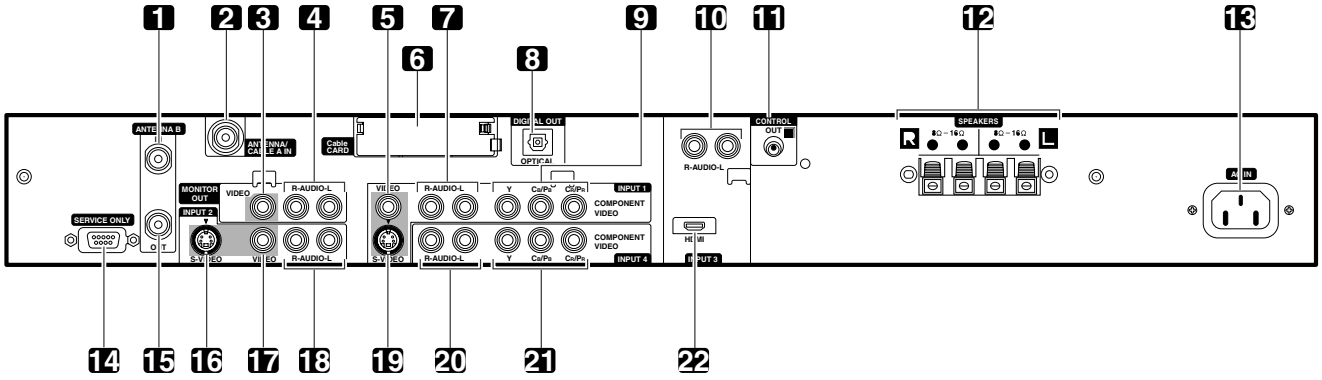


1 **POWER** button
2 STANDBY indicator
3 ON/DATA indicator
4 Remote control sensor
5 **STANDBY/ON** button
6 **INPUT** button
7 **VOLUME +/-** buttons
8 **CHANNEL +/-** button

Rear view

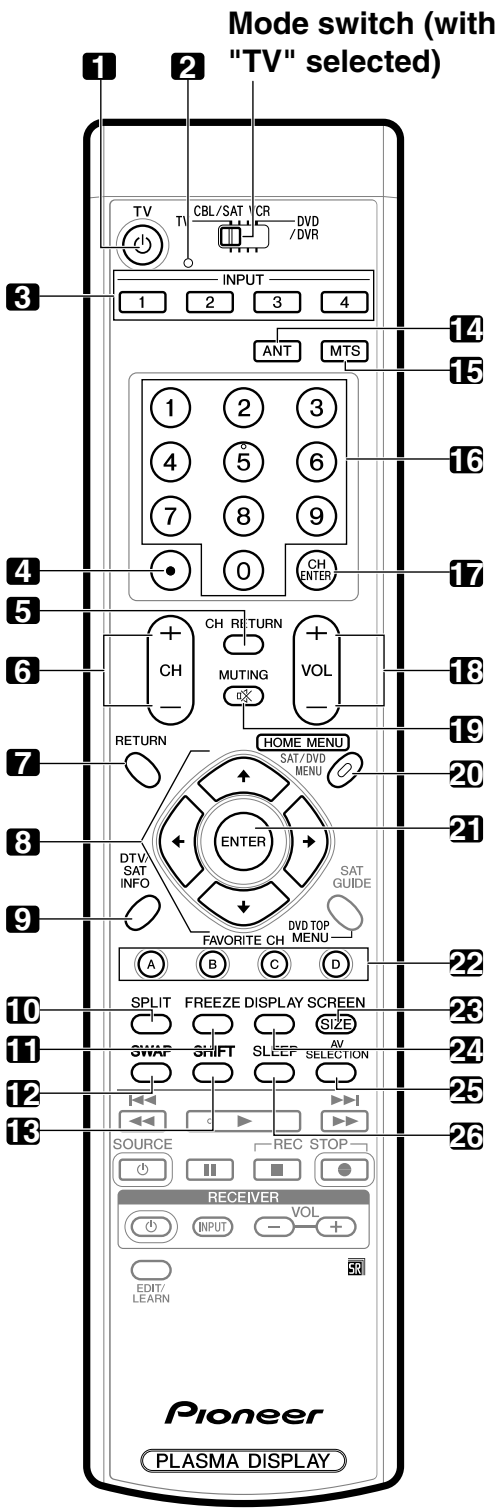


The terminals have faced downward.



1 ANTENNA B IN terminal
2 ANTENNA/CABLE A IN terminal
3 MONITOR OUT terminal (VIDEO)
4 MONITOR OUT terminals (AUDIO)
5 INPUT 1 terminal (VIDEO)
6 Cable CARD slot
7 INPUT 1 terminals (AUDIO)
8 DIGITAL OUT terminal (OPTICAL)
9 INPUT 1 terminals (COMPONENT VIDEO: Y, CB/PB, CR/PR)
10 INPUT 3 terminals (AUDIO)
11 CONTROL OUT terminal
12 SPEAKERS terminals (R - L)
13 AC IN terminal
14 RS-232C terminal (service only)
15 ANTENNA B OUT terminal
16 INPUT 2 terminal (S-VIDEO)
17 INPUT 2 terminal (VIDEO)
18 INPUT 2 terminals (AUDIO)
19 INPUT 1 terminal (S-VIDEO)
20 INPUT 4 terminals (AUDIO)
21 INPUT 4 terminals (COMPONENT VIDEO: Y, CB/PB, CR/PR)
22 HDMI terminal (INPUT3)

Remote control unit



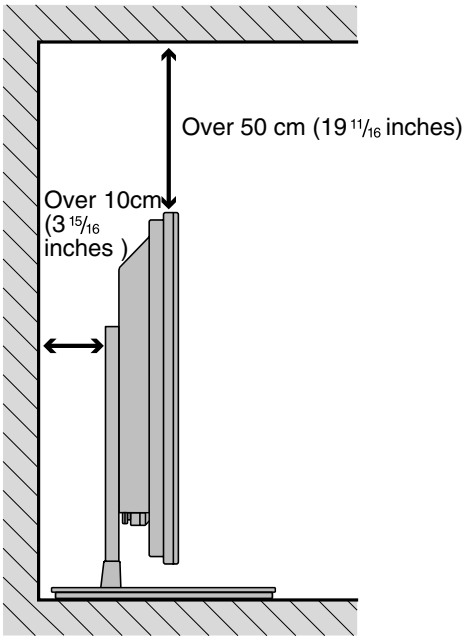
With the mode switch set to TV

1 **TV ⏻ :** Turns on the power to the Plasma Display or places it into standby mode.
2 Transmission confirmation LED
3 **INPUT:** Selects an input source of the Plasma Display. (INPUT 1, INPUT 2, INPUT 3, INPUT 4)
4 **• (dot):** Enters a dot.
5 **CH RETURN:** Returns to the previous channel.
6 **CH +/- :** Selects the channel.
7 **RETURN:** Returns to the previous menu screen.
8 **↑/↓/←/→:** Selects a desired item on the menu screen.
9 **DTV INFO:** Shows more information on DTV programs.
10 **SPLIT:** Switches the screen mode among 2-screen, picture-in-picture, and single-screen.
11 **FREEZE:** Freezes a frame from a moving image. Press again to cancel the function.
12 **SWAP:** Switches between the two screens when in the 2-screen or picture-in-picture mode.
13 **SHIFT:** Moves the location of the small screen when in the picture-in-picture mode.
14 **ANT:** Selects the antenna (A, B).
15 **MTS:** Selects the MTS/SAP.
16 **0 - 9:** Selects the channel.
17 **CH ENTER:** Executes a channel number.
18 **VOL +/- :** Sets the volume.
19 **MUTING:** Mutes the sound.
20 **HOME MENU:** Displays the menu screen.
21 **ENTER:** Executes a command.
22 **FAVORITE CH (A, B, C, D):** Selects any of the four preset channels. While watching, you can toggle the set channels by pressing **A**, **B**, **C** and **D**.
23 **SCREEN SIZE:** Selects the screen size.
24 **DISPLAY:** Displays the channel information.
25 **AV SELECTION:** Selects audio and video settings. (STANDARD, DYNAMIC, MOVIE, GAME, USER.)
26 **SLEEP:** Sets the sleep timer.

NOTE

- When using the remote control unit, point it at the Plasma Display.
- If the remote control unit is left in total darkness for a long period of time, it will not emit light, but will not be damaged. In this case, place it in a bright place for a little while before using it.

Installing the Plasma Display



Locating

- Avoid direct sunlight. Maintain adequate ventilation.
- Because the Plasma Display is heavy, be sure to have someone help you when moving it.

CAUTION

- If you place anything on the top of the Plasma Display it will not receive enough ventilation and will not operate properly.

NOTE

- Allow enough space around the upper and back parts when installing to ensure ventilation around the backside.

Using the optional PIONEER stand

For details on installation, refer to the instruction manual supplied with the stand.

CAUTION

- This product may be used only with model PDK-TS10 stand. Use with other stands may result in instability causing possible injury.

Using the optional PIONEER speakers

For details on installation, refer to the instruction manual supplied with the speaker.

CAUTION

Operating Environment

Operating environment temperature and humidity: +0°C to +40°C (+32°F to +104°F); less than 85% RH (cooling vents not blocked)

Avoid installing at the following locations:

- Under direct exposure to sunlight
- Under strong artificial light
- In high humidity
- Poorly ventilated

Preventing the Plasma Display from Falling Over

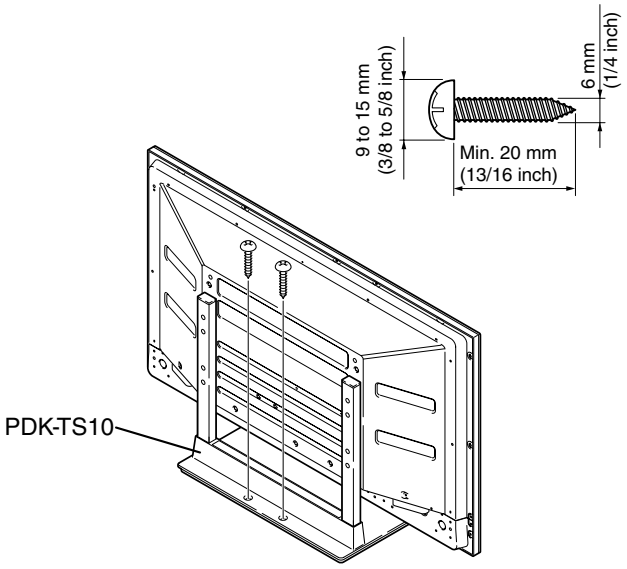
After installing the stand, be sure to take special care to ensure that the Plasma Display will not fall over.

Stabilizing on table or floor

Stabilize the Plasma Display as shown in the diagram using screws that are available on the market.

NOTE

- To stabilize the Plasma Display on a table or on the floor, use screws that have a nominal diameter of 6 mm (1/4 inch) and that are at least 20 mm (13/16 inch) long.



CAUTION

- A table or an area of the floor with adequate strength should always be used to support the Plasma Display. Failure to do so could result in personal injury and physical damage.
- When installing the Plasma Display, please take the necessary safety measures to prevent it from falling or overturning in case of emergencies, such as earthquakes, or of accidents.
- If you do not take these precautions, the Plasma Display could fall down and cause injury.
- The screws, hooks, chains and other fittings that you use to secure the Plasma Display to prevent it from overturning will vary according to the composition and thickness of the surface to which it will be attached.
- Select the appropriate screws, hooks, chains and other fittings after first inspecting the surface carefully to determine its thickness and composition and after consulting a professional installer if necessary.